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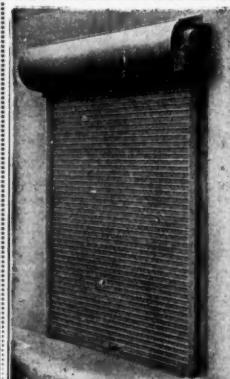


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A MORNING PRAYER.

THE day returns and brings us the petty round of irritating concerns and duties. Help us to perform them with laughter and kind faces. Help us to play the man. Let cheerfulness abound with industry. Give us to go blithely on our business all this day: bring us to our resting beds weary and content and undishonored, and grant us in the end the gift of sleep.—Robert Louis Stevenson.

WRONG.

BARNEY BARUCH causes a lot of unhappiness in this world, but we're thankful it's all confined to Republicans”—Asheville (N. C.) Citizen.

The Citizen is wrong. He caused a thousand times more unhappiness to Democratic cotton growers than he has ever caused to Republicans. Let the Citizen ask President Wanamaker of the American Cotton Association, Harvie Jordan and other cotton authorities as to the unhappiness he created for cotton growers.

LUMBER CONVENTION IN NORTH CAROLINA.

THE manufacturers of North Carolina pine have called a meeting to be held at Raleigh on October 7, and in a letter from Mr. C. B. Thrift of that city, chairman of the committee, he says:

"The lumber manufacturers of Carolina Pine realize that some determined action must be taken at once to stabilize market conditions and avoid a complete shut-down of all the mills in this territory, resulting in cutting off production and consumers faced with a shortage of lumber when the construction of homes is started. The price of lumber to the manufacturer today is below cost of production, and mills are rapidly being closed."

VALUE OF IMPORTATIONS OF FOOD PRODUCTS RUNNING FAR AHEAD OF EXPORTS.

LAST week the MANUFACTURERS RECORD quoted an extract from an interview with Secretary Houston in which he pointed out the great exportation of foodstuffs from this country, and which contained the following:

"He laughingly referred to the recent statements of political speakers, who suggested that a high tariff should be placed at once on foodstuffs or agricultural products. He said the speaker undoubtedly did not recall that in comparison with the exportations of American farms the imports are negligible."

We are sorry that the Secretary of the Treasury has tried to make light of the serious situation the American farmers face in trying to compete with the flood of cheap importations of foreign agricultural products, for it is a pity to see any man holding such a governmental position so densely ignorant of the very statistics issued by his own department. Mr. Houston cannot down truth by ridicule, for he only makes himself a nation's joke, though a desperately costly one.

Since when have our imports of farm products become "negligible"? Such imports have increased rapidly, and are causing widespread alarm to producers of some crops, as witnessed in the critical situation confronting the peanut growers and cottonseed producers, who, on account of the enormous increase in importations of cheap Oriental peanuts and vegetable oils, have seen prices drop below the actual cost of production of these products in this country.

Our importations of farm products cannot be "negligible" when during the last fiscal year ending June, 1920, we exported \$626,577,003 worth of foodstuffs in crude condition and food animals, and imported \$622,439,745 worth of similar unmanufactured food products. If to the value of these unmanufactured food products is added the value of the partly and wholly manufactured foodstuffs, including food-animal products, the United States imported during the last fiscal year \$1,513,776,209 worth of food products, against a total export value of similar food products of \$2,141,193,130, which shows that we are shipping away only \$628,000,000 more than the country is receiving from the outside.

The increase in the value of imports of foodstuffs has been very rapid. For the fiscal year 1918 the value of unmanufactured and manufactured food products imported was \$752,908,835; in 1919 the value was \$832,422,991; and during the last fiscal year our imports of these products jumped to \$1,513,776,209.

Not only have our imports of food crops and food animals shown an alarming increase, but comparing the value of imports of all products of the soil, including animals and animal products, for the fiscal year ending June, 1920, with previous 12-month periods, it is seen that in 1918 \$1,251,922,154 worth

of these agricultural products were imported; in 1919, \$1,383,533,908 worth, and during the last fiscal year the value reached \$2,547,389,600, or nearly double the value of the previous 12-month importations.

Our imports of agricultural products are over 55 per cent of the value of the country's exports of similar commodities in 1920, and about half the value of the total imports of the country. We do not think this proportion of agricultural imports to exports and to total exports can be classed a negligible. Nor would anyone else think so whose knowledge of such things was not entirely negligible.

Without the enormous value of cotton exports our proportion of imports to exports of agricultural products would be a calamity. Excepting cotton, this country imported unmanufactured products of the soil to the value of \$1,290,345,065 for the fiscal year of 1920, compared to \$913,865,779, the value of the exports of similar products during that year. Therefore, if cotton is eliminated the value of our imports of agricultural products in 1920 would be \$376,476,286 more than the value of this class of exports.

We have seen how vast is the aggregate value of our imports of products of the soil; now let us see how these totals are made up.

VALUE OF IMPORTS INTO THIS COUNTRY OF PRODUCTS OF THE SOIL AND ANIMAL PRODUCTS FOR THE FISCAL YEAR ENDED JUNE, 1920, COMPARED WITH THE CORRESPONDING TWELVE MONTHS OF 1919 AND 1918.

	1918.	1919.	1920.
Foodstuffs in crude condition, and food animals.....	\$372,681,751	\$376,222,730	\$622,439,745
Foodstuffs partly or wholly manufactured	380,227,084	456,200,261	891,336,464
Total food imports.....	\$752,908,835	\$832,422,991	\$1,513,776,209
Unmanufactured cotton.....	\$36,020,483	\$37,633,612	\$156,918,719
Manufactures of cotton.....	44,751,181	34,762,723	111,874,821
Total cotton imports.....	\$80,771,664	\$72,396,335	\$268,793,540
Wool.....	\$198,545,911	\$224,410,662	\$212,848,568
Manufactures of wool.....	12,476,798	13,273,481	43,537,552
Total wool imports.....	\$211,022,709	\$237,689,543	\$256,386,120
Tobacco leaf.....	\$45,320,524	\$66,329,689	\$78,164,290
Manufactures of tobacco.....	7,666,219	9,983,622	13,050,097
Total tobacco (Imports) ..	\$52,986,743	\$76,313,311	\$91,214,387
Total hides and skins.....	\$131,628,352	\$149,288,544	\$376,892,462
Total leather and manufacturers of.....	22,603,851	15,423,184	40,327,091
Total hides and manufacturers of.....	\$154,232,203	\$164,711,728	\$417,219,553
Grand total of imports of agricultural products manufactured and unmanufactured	\$1,251,922,154	\$1,383,533,908	\$2,547,389,600

The value of crude foodstuff importations increased from \$376,222,730 in 1919 to \$622,439,745 in 1920.

The value of unmanufactured cotton imported in 1919 was \$37,633,612, compared with \$156,918,719 in 1920. The total value of manufactured and unmanufactured cotton imports jumped from \$72,396,335 in 1919 to \$268,793,540 in 1920, or 271 per cent.

Importations of tobacco leaves increased in value from \$66,329,689 last year to \$78,164,290, and our total tobacco importations increased from \$76,313,311 in 1919 to \$91,214,387 in 1920.

The value of the importations of hides and skins in 1919 was \$149,288,544, and for the fiscal year of 1920, \$376,892,462.

In 1919 this country imported 253,876,730 pounds of cattle hides, while for 1920 we imported 439,461,092 pounds.

The quantity of calf skins imported increased over three times, and in 1919 we imported 61,895,515 pounds of sheep skins, compared with 100,866,446 pounds in 1920.

Is it any wonder that the hide and skin producers of Texas and other States, with their market demoralized, are asking for protection? We are quite sure they do not think importations are negligible.

There has also been a great increase in cotton importa-

tions. In 1919 we imported \$303,126 worth of cotton from the United Kingdom, and in 1920, \$18,089,575. From Egypt in 1919 we imported \$23,037,356 worth of cotton, and in 1920, \$102,994,635 worth, while the value of the importations of cotton from Mexico increased from \$6,788,484 to \$12,592,607, and from Peru the importations of cotton increased in value from \$4,744,841 in 1919 to \$12,790,174 in 1920. Argentina, which shipped nearly 10,000,000 bushels of corn to the United States in 1920, increased the value of its hide and skin exports to us from \$23,272,954 in 1919 to \$62,773,857 in 1920.

We are glad to say that the agricultural producers of the country have not treated the growing importations as negligible and something to jest about when the question of protective tariff is mentioned. The old democratic "free-trade" Constitution of Atlanta is among the Southern papers which has seen the light and is pleading for protection from cheap Oriental and European products. Governor Parker of Louisiana, a Democratic Governor of a Democratic State of the Democratic South, and others have issued a call for a Southern Protective Tariff Congress at New Orleans in October, to which invitations have been issued to every Governor and Southern Congressman, to discuss the question of foreign importations and their effect upon the agricultural and industrial interests of the South. Mr. Houston has amply demonstrated that his knowledge of the whole situation is disastrously negligible. The more's the pity.

A Government report for eight months of the calendar year, just issued since the foregoing was written, shows that we have now reached the amazing point where our importations of foodstuffs are running far ahead of our exports of similar products. During August we imported of foodstuffs \$210,246,990 worth, while our exports of foodstuffs for the same month were valued at \$154,341,022, the excess of imports over exports for the one month being \$55,900,000. During the first eight months of the calendar year ending with August the total importations of foodstuffs amounted to \$1,366,681,248, while the exports of foodstuffs for the same period amounted to \$1,322,435,732. Thus in the eight months our food importations exceeded our exports by \$44,245,516.

For the month of August, 1920, we imported \$210,246,990 worth of unmanufactured and manufactured foodstuffs, compared with \$84,028,708 in August, 1919, and for the first eight months ending August our imports of these products amounted to \$1,366,681,248, or \$534,258,257 more than the total value of similar imports for the entire fiscal year 1919 and \$676,042,407 more than the value of the imports for the first eight months of 1919.

Furthermore, while we have seen our importations of foodstuffs steadily growing, our exports of these commodities are decreasing. In August this country exported \$104,394,842 worth of food and food animals and manufactured food products valued at \$49,946,180, or a total of unmanufactured and manufactured foodstuffs of \$154,341,022, compared with \$205,187,672 worth exported in August, 1919. Thus in one month of August, compared with August of the previous year, our exports of food products increased \$126,218,000, while during the same period our exports decreased \$50,746,000.

For the first eight months ending with August our exports of unmanufactured and manufactured foodstuffs was valued at \$1,322,435,732, which is \$1,180,400,000 less than similar exports for the fiscal year 1919, and \$570,168,947 less than the value of the exports for the first eight months of 1919.

Our total imports for August amounted to \$513,550,615, compared with \$307,293,078 for August, 1919. The total domestic exports for August were valued at \$571,615,522, compared with \$634,470,487 in August last year. For the first eight months ending with August our total imports amounted to \$3,995,178,060, compared with \$2,261,550,440 for the corresponding period of 1919.

The President Enters the Campaign

MY fellow-countrymen: The issues of the present campaign are of such tremendous importance and of such far-reaching significance for the influence of the country and the development of its future relations, and I have necessarily had so much to do with their development, that I am sure you will think it natural and proper that I should address to you a few words concerning them. Everyone who sincerely believes in government by the people must rejoice at the turn affairs have taken in regard to this campaign. This election is to be a genuine national referendum. The determination of a great policy upon which the influence and authority of the United States in the world must depend is not to be left to groups of politicians of either party, but is to be referred to the people themselves for a sovereign mandate to their representatives. They are to instruct their own government what they wish done.

"The chief question that is put to you is, of course, this: Do you want your country's honor vindicated and the treaty of Versailles ratified? Do you in particular approve of the League of Nations as organized and empowered in that treaty? And do you wish to see the United States play its responsible part in it? You have been grossly misled with regard to the treaty, and particularly with regard to the proposed character of the League of Nations, by those who have assumed the serious responsibility of opposing it. They have gone so far that those who have spent their lives, as I have spent my life, in familiarizing themselves with the history and traditions and policies of the nation, must stand amazed at the gross ignorance and impudent audacity which has led them to attempt to invent an Americanism of their own, which has no foundation whatever in any of the authentic traditions of the government.

"Americanism as they conceive it reverses the whole process of the last few tragical years. It would substitute America for Prussia in the policy of isolation and defiant segregation. Their conception of the dignity of the nation and its interest is that we should stand apart and watch for opportunities to advance our own interests, involve ourselves in no responsibility for the maintenance of the right in the world or for the continued vindication of any of the things for which we entered the war to fight. The conception of the great creators of the government was absolutely opposite to this. They thought of America as the light of the world, as created to lead the world in the assertion of the rights of peoples and the rights of free nations; as destined to set a responsible example to all the world of what free government is and can do for maintenance of right standards, both national and international. This light the opponents of the league would quench. They would relegate the United States to a subordinate role in the affairs of the world.

"Why should we be afraid of responsibilities which we are qualified to sustain, and which the whole of our history has constituted a promise to the world we would sustain? This is the most momentous issue that has ever been presented to the people of the United States, and I do not doubt that the hope of the whole world will be verified by an absolute assertion by the voters of the country of the determination of the United States to live up to all the great expectations which they created by entering the war and enabling the other great nations of the world to bring it to a victorious conclusion, to the confusion of Prussianism and everything that arises out of Prussianism. Surely we shall not fail to keep the promise sealed in the death and sacrifice of our incomparable soldiers, sailors and marines who await our verdict beneath the sod of France.

"Those who do not care to tell you the truth about the League of Nations tell you that Article X of the covenant of the league would make it possible for other nations to lead us into war, whether we willed it by our own independent judgment or not. This is absolutely false. There is nothing in the covenant which in the least interferes with or impairs the right of Congress to declare war or not declare war according to its own independent judgment, as our Constitution provides. Those who drew the covenant of the league were careful that it should contain nothing which interfered with or impaired the constitutional arrangements of any of the great nations which are to constitute its members. They would have been amazed and indignant at the things that are now being ignorantly said about this great and sincere document.

"The whole world will wait for your verdict in November as it would wait for an intimation of what its future is to be.

WOODROW WILSON."

The second of the Senate reservations, which President Wilson said would cut the heart out of the league, reads as follows:

"The United States assumes no obligation to preserve the territorial integrity or political independence of any other country by the employment of its military or naval forces, its resources,

or any form of economic discrimination, or to interfere in any way in controversies between nations, including all controversies relating to territorial integrity or political independence, whether members of the league or not, under the provisions of Article X, or to employ the military or naval forces of the United States, under any article of the treaty for any purpose, unless in any particular case the Congress, which, under the Constitution, has the sole power to declare war or authorize the employment of the military or naval forces of the United States, shall, in the exercise of full liberty of action, by Act or Joint Resolution so provide."

The meaning of a contract is subject to interpretation long after the makers of it are dead. Time is friendly to ambiguity and friendlier still to the kind of ambiguity that would permit concentration and extension of power. Experience with our own Constitution has proved that documents of that sort are never interpreted to weaken the powers delegated by the instrument, but are invariably interpreted to extend and magnify them. No man of all who participated in the making of the Federal Constitution but would have admitted its experimental nature and the right of the individual States to withdraw from the Union if they desired—a right distinctly reserved by two of the States—and yet the passing of the years read those guarantees out of the Constitution and a great war was fought to establish the fact that conditions had overridden stated rights.

If, therefore, in the opinion of President Wilson today, "there is nothing in the covenant that in the least interferes with or impairs the right of Congress to declare war or not to declare war according to its own independent judgment," why is a defining reservation to that effect considered by the President a scrapping of the covenant? The answer is simple enough, for though the technical or machine right to declare war would remain in Congress under the covenant as written, the moral obligation to follow the recommendation of the Supreme Council would be compelling. Without the reservation Congress would be left with the shadow of its constitutional authority; with the reservation, it would have the substance. In the one case, as each incident arose, the nation would be met with the preachers of those asserting that Congress must, to preserve the honor of the nation, do as the Supreme Council directed. In the other case, the merits of each individual emergency alone would be considered.

The nation knows something of Mr. Wilson's ideas on national honor. He has not hesitated, time and again, to sacrifice the country's material interests to satisfy critics who insisted that the nation's honor was at stake. Within the last few weeks he has solemnly refused to carry out the law of the land, nullifying it by deliberate inaction, because, in his opinion, to do otherwise was to impair the sanctity of the national word. Is it to be doubted, then, that he, or some President to follow him, having sole control over the American vote in the Supreme Council, would at once become an advocate of any recommendation made by the Supreme Council, and in reporting the recommendation to Congress would declare that the nation stood bound in honor to make good the signature of its representative even as now the President, in his appeal above, insists that he dedicated the nation at Versailles and asks "do you want your country's honor vindicated?"

Aye, there are some millions who want it vindicated, and they want it vindicated now, in advance, by explicit statement of what it is the nation undertakes to do. They are tired of thinking they were building a canal to bring the coasts together and rudely waking to have the President of the United States to tell them that this was not at all the purpose for which they spent their hundreds of millions, but that the canal was an offering to the world in general and we must permit the warships of an enemy to use it on equal terms with our own. They are tired of being asked to pledge

themselves to what they are assured is one kind of obligation and being told a year or two later that it is an entirely different sort of obligation. They view with suspicion any man, even the President of the United States, who insists that ambiguities be retained in a proposed contract and refuses to accept definite statements that would remove the uncertainties.

We are asked to make a compact with the other nations of the world. What they think the contract means is quite as important as what we think it means. The President says that the covenant in no way impairs the validity of the Monroe Doctrine. The British have stated officially that if any difficulties concerning the interpretation of the Monroe Doctrine arise, "the league is there to settle it." Here, then, is a specific case, in which Mr. Wilson's interpretation and another nation's interpretation are diametrically opposed. Is it wisdom, in such circumstances, to shut our eyes to the plain meaning of written obligations and accept the President's view that they do not mean what they say?

Nor is the President in agreement with himself. He presented to the Senate a tripartite agreement among France, England and the United States whereby this nation agrees, in advance, to put its entire resources at the service of France in case that nation should be attacked by Germany. And in explaining this pact the President stated that it merely carried out what the United States was already obligated to do anyhow under the covenant. He could not well maintain that the agreement with France is a scrap of paper dependent for validity, after ratification, on the independent judgment of Congress when the stated case arose. Yet he says that this agreement to help France is but incidental to our general obligation to aid any nation whose territorial integrity happened to be threatened, while at the same time asserting that Congress would be under no obligation. It is a topsy-turvy world, we admit, but not yet is white black nor do men travel in the same direction when one goes east and the other west.

When a man contracts to deliver so many pieces of cloth he does not detail in the contract the method of manufacture. When the United States agrees to buy 100 tons of coal, it does not recite in the contract by what methods of taxation it intends to raise the money. When the United States agrees to do anything, it is assumed that the regular constitutional machinery will be employed to make the agreement effective. It is trivial to maintain that because such constitutional processes are employed in making good an obligation that freedom of action in the circumstances is retained. That is merely asserting a very obvious thing in a very solemn way. It sounds good but it does not mean anything.

If Article X subjects the nation to no obligation, why have it? If it does subject the nation to an obligation, why object to a specific statement of what that obligation is?

It would appear that the covenant has been wrecked on the wilfulness of one man.

The gratuitous assumption by the President that the covenant exactly as he wrote is a "promise sealed in death" and that those who sleep in hallowed graves in France will walk at night and bow their heads in shame within the ghostly precincts of their abode is woefully improper. They kept their rendezvous with death in defense of their country. The colors under whose folds they gladly died were colors they had loved from youth, and the tens of thousands and millions of their comrades who slept with them, fought by their sides and buried them, and who are now about to cast their votes against the surrender of American sovereignty, compose a living refutation of the doctrine of sanctification which the President preaches. Too often the nation has been led astray by implications of dishonor. It resents the contention that a pledge has been given to its dead to ratify an instrument the terms of which, in detail, had not even been considered by the President or this Government until the collapse of the Hun was already apparent to all who had eyes to see. "His

honor rooted in dishonor stood." We must beware lest we mistake will o' the wisps for the shining lights of destiny.

Whatever the covenant may mean to Mr. Wilson it is quite obvious that the European concept of it is quite different. We find the diplomatic correspondent of the London Telegraph, to illustrate, saying that the military force which the French were so anxious at the San Sebastian conference of the League Council to have established, was postponed because conditions were not just ripe, but that, of course, later on the league would have its own military establishment to police the world and keep it on good behavior. And just a little previous Lord Robert Cecil, chief British exponent of the league, asserted in an interview that the league ought now to have its own naval force, but that the establishment of its army could well be postponed until sentiment was more ripe. Uncle Sam has not yet been persuaded to drink the deep waters of trouble, and it is considered wise to be gentle during the period of coaxing.

We have had reports in this country about the activities of the labor section of the league, which has been trying to organize a coal division to "internationalize" the coal supply. What America does not know is that the same labor section of the league is planning the appointment of a committee to consider immigration in all its phases and adopt international rules and regulation for the control of immigration. Nor do many know that this labor section employs a representative in Washington to spread propaganda as to its activities and to keep it informed of all movements affecting labor in the United States. And yet the advocates of the league have been saying that immigration, of course, is a purely domestic question. The South, when the Government was formed, also had an idea that slavery was a strictly State affair. It is a wise nation that knows whither it is going.

There was in Abraham Lincoln a touch of the prophetic vision. At Springfield, Ill., in 1837, expressing his fear that some man of genius would arise to menace the integrity of our institutions, said: "Towering genius distains a beaten path. It seeks regions hitherto unexplored. It sees no distinction in adding story to story upon the monuments of fame erected to the memory of others. It denies that there is glory enough to serve under any chief. It scorns to tread in the footsteps of any predecessor, however illustrious. It thirsts and burns for distinction." * * * Is it unreasonable, then, to expect that some man possessed of the loftiest genius, coupled with ambition sufficient to push it to its utmost stretch, will at some time spring up among us? And when such a one does, it will require the people to be united with each other, attached to the Government and laws, and generally intelligent, to successfully frustrate his designs. Distinction will be his paramount object, and although he would as willingly, perhaps more so, acquire it by doing good as harm, yet, that opportunity being past and nothing left to be done in the way of building up, he would set boldly to the task of pulling down."

If the sort of Americanism which has insisted that the independence of the nation be preserved is merely an exhibition "of gross ignorance and impudent audacity," from Mr. Wilson's viewpoint, none need further wonder why he has done the things he has done. Lansing and Knox and Root, whatever their ignorance and whatever their impudence, have never publicly exhibited either. Lansing said that if the people of the United States knew what the treaty "let them in for" they would never tolerate it, and for that largely he was drawn out of the Cabinet. A campaign of education has taught them to realize some of the things "it let them in for." The measure of their progress from ignorance to knowledge is the measure of the public standing of the league today. Thousands who a year ago thought of it as God-given, now, in fuller knowledge, denounce it, and the "impudent audacity" of the American people is about to translate itself in the ballot box into accepted and definite national policy.

Breaking Farm Product Prices Is Enabling Big Interests to Buy at Expense of Farmers

IN a printed defense, in circular form, of the Federal Reserve Board, Mr. John M. Miller, Jr., president of the First National Bank of Richmond, says:

"The South has borrowed more liberally from the Federal Reserve Banks than any other section. On September 17, the Federal Reserve Banks of Dallas, Atlanta, Richmond, St. Louis and Kansas City—all dealing very largely with the cotton and tobacco sections of our country—were borrowing \$147,000,000 from the Federal Reserve Banks of Boston, Philadelphia, Cleveland and San Francisco, showing conclusively that the Federal Reserve Banks of the South and Southwest were not only loaning to their member banks all of their own loanable funds, but, in addition, \$147,000,000 of money from the other sections named."

Mr. Miller's argument is weak, for it makes an appearance of reason without a safe foundation on which to base it. Of course, the South has borrowed largely. It has been doing that ever since the poverty brought about by the Civil War. In former years the United States was a tremendous borrower from Europe for the building of its railroads and for carrying out other great enterprises. It had not then accumulated capital sufficient to carry on its own development. The South has been in the same situation. It has had comparatively little accumulated capital. For instance, North Carolina, which last year produced \$200,000,000 more of agricultural products than California, had total bank resources of \$200,000,000 as compared with bank resources of \$1,600,000,000 in California. California thus had seven times as much bank resources as North Carolina, though the value of its agricultural output was \$200,000,000 short of North Carolina.

Necessarily, the greater the development of any country, the greater the demand for capital; and as the South had not accumulated sufficient capital to carry on its rapidly-expanding business, it has had to look to other sections for the past 50 years in exactly the same way that the United States looked to Europe for capital for 50 years of its building work. The Federal Reserve System was brought into existence for the purpose of enabling the banks of the outlying districts of the country to be less dependent upon New York for the financial resources needed for handling the crops and general business operations; but the Federal Reserve System has lamentably failed at the very points where its advocates claimed it would be strong.

Mr. Miller also says, "Certainly the South has been treated with the greatest liberality." On that point, as on others, we take direct issue with the correctness of Mr. Miller's views. The South has raised cotton and tobacco crops at a higher cost than ever before, and the South had a right to expect that it would receive the co-operation of the Federal Reserve System to such an extent that these crops could be marketed over 12 months and not be forced upon the market at a rate which would necessarily break the price down and give to the strong buyers of the East and of Europe the opportunity to purchase at these panic-prices to the great impoverishment of the growers. The Federal Reserve Board has carried out its scheme of deflation in a way which, while claiming to be an effort to lessen speculation, will impoverish the small man by forcing him to sell his crops promptly, and will greatly enrich the big speculator and the big buyer because they can secure the credit necessary to carry these products.

One of the ablest cotton mill men in the South, representing an investment of many millions of dollars, Mr. E. T. Comer, president of the Bibb Manufacturing Co. of Macon, in a very striking letter in this week's issue, takes the ground that as the banks of the country will have to finance the cotton dur-

ing the next 12 months, whether the cotton be owned by the speculator or the mill man or the farmer, there is no legitimate reason why the farmer should not be financed in order that he may carry his cotton and market it gradually during 12 months instead of being forced to sell during three months.

Mr. Miller takes the ground that nearly all the criticism against the Federal Reserve Banks is based on misinformation. In that he is again incorrect. The MANUFACTURERS RECORD learned early last winter that it was the determination of the Federal Reserve Board to force all loans on Government bonds out of the banks, and to bring on a deflation of commodity prices and of wages as far as might be possible. This was the definite plan undertaken. It has been carried out ruthlessly, and its effect is already proving disastrous. It has deflated business, but it has tremendously inflated failures. It has decreased production of the things needed by the nation, but it has increased bankruptcy. It is not surprising, in view of the recent statements put forth by Secretary Houston, and of the work of the whole board, that such is the outcome.

Last winter, the MANUFACTURERS RECORD had a letter from a member of the Federal Reserve Board, in which he said:

"I do not see how you or anyone else could reasonably contend that the farmer is not getting the full price for cotton at 41 cents, and if this price is not in keeping with the prices of cotton goods, cotton goods should come down. * * * There are some very sound-minded men who think that the cost of producing cotton and the present selling prices are entirely too wide to continue."

These statements were called forth by a letter from the MANUFACTURERS RECORD to the effect that cotton was not then selling at a price commensurate with the price of manufactured goods, and this member of the board was urged to make a careful study of the actual cost of cotton growing, which he declined to do. With such a position taken by the board, it was only natural that the inevitable result would be a curtailment of credit, which would frighten the bankers, frighten the cotton growers, and which would be a sound excuse for the buyer holding off and thus intensifying the depression. The world needs every bale of cotton that the South has raised, but the buyers of the world will not buy the cotton so long as the Federal Reserve Board, or Secretary Houston, stands with a club over the cotton grower, forcing him to rush his cotton to the market, and with the same club practically holds back the cotton buyer from coming into the market, awaiting the still lower price which he anticipates as the outcome of the board's work.

But it is not in cotton alone that this condition is found. It is found in every business. The Federal Reserve Board, having made many blunders in financing the war and bringing about great inflation, makes still greater blunders by trying to bring about quick, drastic deflation, and in doing so brings about great industrial unrest and losses running into the billions to the farmer and other interests. Mr. Miller, fine banker as he is, speaks from the banker's standpoint; but the bankers do not know everything in regard to business interests or financial operations.

MILLIONS OF OTHERS AGREE WITH HIM.

Welch, W. Va., September 27.

Editor Manufacturers Record:

Please send to me ten (10) copies of your pamphlet, the "League of Nations." I hand you check for \$1.50 to cover same. I have given this matter a great deal of study, and am absolutely convinced that the stand the MANUFACTURERS RECORD has taken on this subject is unquestionably right.

B. HAMPTON GRAY.

ENGLAND EXPANDS ITS INDUSTRIES: WE ARE THROTTLING OURS.

WHILE American banking methods are breaking down our credit system and endangering the safety of the people of the country, English bankers have been issuing new securities to a greater extent than even in 1913. The Bankers' Trust Co. of New York, in a recent report on this situation, gives the following remarkable figures:

"British new capital issues in July, 1920, according to information just received by the Bankers' Trust Co. of New York from its English Information Service, amounted to £43,422,343, or about 50 per cent more than the total of new capital issues in July, 1919.

"The figures represent the amount of money which the public has been asked to subscribe during seven months of the present year, for the financing of British business enterprises.

"The total thus solicited surpassed all records of private investment offerings in any previous year in Great Britain. The amount to the end of July was £284,654,509, compared with £237,541,303 for all of 1919, and £242,139,000 in 1913.

"The total of new capital issues in 1913 was the previous highest amount recorded in any single year in England. The average rate for the first seven months of 1920, if continued until the end of the year, would double the amount of new capital issues recorded in 1913.

"The following table shows the private investment offerings by months for corresponding periods of 1919 and 1920:

BRITISH NEW CAPITAL ISSUES.

	1919.	1920.
January	£18,340,586	£42,446,210
February	9,683,737	35,213,793
March	11,862,083	69,355,644
April	6,048,111	45,795,840
May	17,541,224	20,860,980
June	16,823,315	27,559,699
July	28,277,343	43,422,343
Total.....	£108,576,399	£284,654,509

"The increase of new capital issues began during the latter part of 1919, after the removal of Government war restrictions."

Thus England, carrying its enormous indebtedness due to the war, relatively many times greater than our indebtedness, is finding a way to finance new issues, is expanding its commerce and is capturing the world's trade, while American business is throttled by the grip upon the throat of credit by the Federal Reserve Board.

Surely the time has come for the American people to break loose from the power of Wall Street finance, whether controlled directly through Wall Street banking houses, as in former years, or controlled through the Federal Reserve Board, which has even a greater and more dangerous power than Wall Street ever had. Indeed, it looks as though the power of Wall Street in governing the finance of the nation is finding expression through the activities of the Federal Reserve Board, in bringing about conditions for enormously increasing the burden of indebtedness upon the country, to the advantage of the present holders of Government securities after having forced out of the banks, in violation of every sacred promise, the weak holdings of Liberty bonds carried by men and women who had accepted in good faith the promises of the Treasury Department and the banks. The Federal Reserve Board then undertook to deflate all values, and in doing so it has brought great suffering upon millions of people.

Our financial operations, measured by the work of the Federal Reserve Board, are as children playing with fire, while England goes on its way expanding credit to its business men, vastly enlarging their operations through all parts of the world and giving to England a dominating position greater than it ever held before the war. We throw away the chance for world-wide financial influence such as no other country has ever had, and at the same time destroy our domestic prosperity by the work of theorists who bow down in the worship of an arithmetical figure.

The cartoonist might well draw a picture of the members of the Federal Reserve Board bowing in humble worship before the figure "40" as expressing the gold reserve, shudder-

ing whenever it falls a fraction below that figure and dancing in gleeful joy if it goes a fraction above. With more than the enthusiasm with which the Hebrews of old worshiped the golden calf the Federal Reserve Board is worshiping the golden "40" per cent reserve, and the nation is paying the penalty of such idolatry, the effect of which will be equally as destructive as was the worship of the golden calf in olden days.

NOTICE OF FUNERAL—DIED IN INFANCY.

Contributed by CHARLES P. HEYWARD, Southern Pines, N. C.

The League of Nations.

Services to take place November 2, to commence at sunrise and close at sunset. It is the desire of the committee in charge to make this the greatest funeral ceremony in history; therefore, all Americans are requested to be present. A small space will be reserved for mourners.

At 8.30 P. M. all bands are requested to play America and the greatest chorus ever conceived of will raise their voices in praise for the Preservation of American Independence.

Obituary.

On November 2, 1920, the remains of the departed League of Nations were laid at rest. Not, however, in the cold bowels of mother earth, but under the warm blanket of American patriotism and intelligence. The services were unique in that the mourners were few, the great mass of people being jubilant. The services closed with the Stars and Stripes still floating over our land and the three great hymns: "My country 'tis of thee, sweet land of liberty," "Hallelujah 'tis done," "Praise God from whom all blessings flow."

RAPID DEVELOPMENT OF SHEEP-RAISING INDUSTRY IN NORTH CAROLINA.

THE sheep-raising industry is making great strides in North Carolina. Figures recently compiled by N. Buckner, secretary of the Asheville Board of Trade, show that practically every county in the State has made remarkable progress. This is attributed in large measure to the fight which the office of the secretary has been making for the sheep and against the predatory dog. Moreover, the State has a Field Sheep Agent, Mr. George Evans, an Englishman who has been all his life engaged in the sheep industry. His experience in the work is of the greatest value in the development of the sheep industry throughout the State.

The increase in the number of sheep in the mountain section of North Carolina, where the industry thrives greatest, is nearly 400 per cent—from 45,338 in 1918 to 228,578 in 1919. This is an almost incredible showing for such a short period of time. Following are the figures for 15 mountain counties as published in a recent issue of the Charlotte Observer:

County.	1918.	1919.	Increase.
Alleghany	7,683	47,051	37,368
Ashé	10,372	76,958	66,586
Avery	1,700	19,567	17,867
Buncombe	1,670	10,383	8,703
Cherokee	1,306	6,016	4,710
Clay	951	6,265	5,314
Haywood	3,000	30,127	27,127
Jackson	3,000	17,171	14,171
McDowell	190	671	481
Macon	2,200	10,750	8,550
Madison	3,637	32,209	28,572
Mitchell	979	9,062	8,083
Polk	85	262	177
Transylvania	1,000	1,679	979
Watauga	8,585	10,150	1,565
Total.....	45,338	228,578	224,246

Is Secretary Houston Trying to Wriggle Out?

THE cotton market broke as the season opened in 1918 because of a widely-disseminated report that Secretary of Agriculture Houston had stated that 25 cents the pound for cotton was an amply remunerative price. Producers lost millions as a result of that statement. It was later denied by the Secretary that he had ever made it, but the denial, strangely enough, was not given publicity until the raiders had had time to work their will on the market.

Two weeks ago this same Mr. Houston, now Secretary of the Treasury, again began issuing statements, and again they were of such a character as to mean millions of profit for those "bearing" the cotton market and correspondingly heavy losses for the producers. And again, after a lapse of time, Mr. Houston put out a statement to the effect that he had been misrepresented or misinterpreted, or incorrectly quoted.

It is a peculiar thing that this public officer should happen to be prolific in interviews just at the critical period in seasonal crop prices, and it is equally peculiar that on each of the two occasions, when he has been in a position to have an influence on cotton prices, fate should have done him the scurvy trick of making him appear to say things that would cause disaster, if not ruin, to the soil from which he sprang and the people among whom he was reared and educated.

We understand that instructions have been given that hereafter Secretary Houston is not to be quoted unless he has issued a signed and formal statement. We suggested last week that some device of the sort be resorted to, but we do not know that it will make a great deal of difference since, when the next cotton year opens, Mr. Houston's views are not likely to be of any importance whatever.

The activities of Mr. Houston had become so ruinous to the South that last week he was deluged with telegrams of protest, many being from politicians who felt that he was playing havoc with the party under whose auspices he holds power. Among those asking Mr. Houston for a definite statement of his policy was Representative James F. Byrnes of South Carolina. He received a reply, and a very remarkable reply it is, for in it Mr. Houston undertakes to draw a demarcation between the Treasury and the banking system. "In speaking of the Government," he says, "I, of course, was speaking particularly of the Treasury. I was not speaking of the banks. They are not the Government."

That is extremely interesting, but this sudden differentiation between the Treasury and the Federal Reserve System is more than amazing to those who have kept in touch with Mr. Houston's various views and statements. It was not so very many months ago, for instance, that this same Secretary Houston, in gloating over the deflation policy of the Federal Reserve Board, and the effort to break the market, quite pompously announced that the objectors might just as well keep still because there was not going to be any change of that policy "while I am Secretary of the Treasury." As he is but one member of a board of seven, the remark seemed to be strangely out of place at the time, and yet it revealed what Mr. Houston felt was his influence over the Board, and his belief that the Board was absolutely dominated by the Treasury.

That was a few months ago, but now, when Mr. Houston finds the walls closing in on him, after the harm has been

done, he explains that he was speaking of the Treasury only and did not have in mind the banking system. This is very satisfying to Mr. Byrnes who "stated that he was satisfied that the speculators knew that the Secretary of the Treasury was stating the policy of the Treasury Department and not announcing any change in the policy of the Federal Reserve System, but that they used the statement of Mr. Houston to raid the market." There is no doubt that they used it.

It is worth while to examine what Mr. Houston did say. As quoted in this newspaper last week, the summary of Mr. Houston's informal statement in the Washington Star was: "Secretary Houston has announced that no extension of credit will be made by the Government to enable persons to hold on to commodities until high prices prevail. Many of the criticisms directed against the Government's present policy of restriction, according to the Secretary, are made by those who are desirous of keeping prices up," etc. There is but one division of the Government that has any power to extend credit to enable persons to hold on to commodities and that is the Federal Reserve Board. "The Government's present policy of restriction" is a Federal Reserve Board policy, and its policy only. How can the Treasury "restrict credit?" It is true that Secretary McAdoo, before the Reserve System was functioning, deposited Government funds in large amounts in the banks of farm centers to allay the disastrous drop in prices attendant on the World War, but now it is the Reserve System which is depended on to finance crop movements. Though Mr. Houston had been talking informally to newspaper men, there was no doubt in their minds that he was referring to banking operations.

Indeed, in the denial of the interview, which Mr. Houston formally issued the following Monday, September 27, he devoted four-fifths of his space to a discussion of what the banks were doing or had done in the matter of discounts, and spoke eloquently of the increase in the volume of Federal Reserve notes.

The conclusion is irresistible that the public was completely justified in its belief that Mr. Houston, when talking about restriction and the Government not helping speculators, etc., was referring to the activities of the Federal Reserve Board, and we see no reason to assume now that anything else was in his mind.

Mr. Houston also tells why he did not permit the war Finance Board to function, as authorized by Congress. We do not know that the Secretary was justified in dissolving the War Finance Corporation on the ground that the power given it to assist in financing export business to the extent of one billion dollars was given "at a time when it was feared exports would not go forward." Cotton interests were able to present very convincing proof that Central Europe and Czechoslovakia would buy heavily of the low grades under fair credit conditions, but the sympathy of the Treasury could not be aroused. Secretary Houston must have known that the selling of the low grades was the big problem, and that Central Europe offered a likely purchaser, particularly Czechoslovakia, but he declined to use the financing power given by Congress. If that was a friendly act, either to the South or to the nation in general, there are many who would like to hear the explanation.

It is quite futile for Mr. Houston to endeavor at this late date to give the impression that he is friendly to agriculture. Quite aside from definite policies pursued by the Reserve Board, in which his fullest influence was exerted in favor of drastic deflation, it is well known that he, perhaps more than any other man in Washington, was a prolific spreader of the doctrine of price-breaking. For months he and the men about him have been preaching nothing else. As the one thing they

crease.
17,268
36,586
17,867
8,703
4,710
5,314
27,127
14,171
481
8,550
28,572
8,083
177
994
1,596
24,246

sought above all others was to break the market for cotton and all crops, it is an insult to agricultural intelligence for them now to assert that they are not responsible for the thing they deliberately brought about. The South has not asked Mr. Houston if he did certain things. The South knows he did them and has merely asked him why.

A United States Senator writes to us to say that he seriously doubts the legality of the program which the Reserve Board and Mr. Houston have been making effective. He is having an investigation made along those lines. We doubt if much can be accomplished in that direction, since the Board has been careful to keep within the letter of the law, however violent has been the disregard of its spirit.

The Federal Reserve Bank of Dallas is very openly advocating the orderly marketing of the cotton crop, and it is doing it in a spirited way, as if anxious to save the people of its section from ruin. In nothing that Mr. Houston says or does is there any spirit except that of antagonism, and no man could have done more than he has done to spread the infamous impression that the South is profiteering and trying to "use" the Government.

The South's cotton is not spun in a day, or a week, or a month. When it is all sold in a short period, either the mills or the speculators must buy it, and to hold it they must have credit. Where do they get it? And are they profiteers, or are they not?

Mr. Houston's defense, we are forced to say, is no defense at all. If he made statements devised to break the cotton market, he ought to accept the responsibility therefor; if he made statements so ambiguous that they were sure to be misinterpreted so as to break the cotton market, his negligence was not a blunder, but a crime. As his power over the market came solely from his official position, his use of that position constituted discrimination against some millions of producers whose servant he is. There are no explanations that can exculpate him.

It is more than a pity that the Federal Reserve System, to which the whole South was taught to look reverently as the vehicle of its liberation from credit slavery, should have been used by the men in charge of it to take the profit out of the cotton crop and compel terrible sacrifice. That it was also an economic crime, future short crops and resultant world shortage and high prices in the years to come will show.

A NATIONAL DISGRACE.

THE United States Government during the war issued billions of dollars of bonds. The Government and the banks under its lead said that these bonds were the best security in the world.

Millions of people were told that the banks would carry the bonds with partial payments, that the buyers might be able to make out of earnings. The banks and the Government begged people, pleaded with them unceasingly, to buy bonds to the utmost extent of their ability to make the first payment, trusting to their earnings from year to year to meet other payments. From thousands of platforms it was said that the moment the war was over these bonds would advance beyond par. This statement was made over and over again by leading bankers in pleading with the people to buy bonds. Every possible power of the Government in every ramification was used to induce the people to buy bonds, and those who did not buy to the utmost limit were called slackers and traitors to the country.

This was the first step in the program.

The next step was the movement by the Federal Reserve Board, of which the Secretary of the Treasury is an active member, to compel all banks to violate their promises and

the faith of the nation with the bond buyers and force out of the banks every loan based on Government bonds. It was a diabolical scheme. One leading banker, a man of the highest standing, wrote to the editor of the MANUFACTURERS RECORD upholding this action of the Federal Reserve Board, and saying that it would be better for the country when all of the weak bond holdings were forced out of banks and when they had fallen into the strong boxes of big institutions and big estates.

The business man who dishonors his own note, dishonors his own promises and gloats over the fact that he has been able to beat his notes or securities down below the selling price in order that he might buy them in at a lower figure would be accounted a fit inmate for the penitentiary. If legally he escaped going to the penitentiary, his honor and his credit would be forever destroyed, but the United States Government, which issued these bonds, and with all of its power and the awakened patriotism of the nation to back up the Government, sold bonds to 20,000,000 people, later deliberately required the banks to call the loans, which every man knew would immediately break their selling price. Hundreds of millions of dollars' worth of bonds were forced out of the banks, and the unfortunate sellers lost anywhere from 10 to 12 or 15 points each over the cost.

The third step in the program is the announcement by the United States Treasury Department that it has bought in at low prices \$1,850,000,000 of bonds. In an attempted defense of the action of buying in these bonds at a low price the Treasury Department said:

"It would have been unbusinesslike to pay more than the individual buyer was paying.

"Government purchases stabilized the bond market and prevented Liberties from going lower, as was intended in the bond purchase provision of the law passed by Congress.

Any other method of retiring these bonds would have been impracticable, cumbersome and unworkable. The Government has as much right to go into the open market as an individual. If a person wants to hold his bond until maturity it will be paid in full. If he is going to sell at a bargain, the Government is privileged to buy."

The business concern that issued such a statement would be run out of any reputable community, for with one hand the Government drove the bonds out of the banks and broke the price, and with the other hand it bought in these depreciated bonds to the extent of nearly \$2,000,000,000. Financial chicanery of disreputable financiers never, we believe, in its rottenest form, could quite match such an act and attempt to uphold it. Mr. David F. Houston is Secretary of Treasury.

OUR FOREIGN TRADE.

THE value of our foreign exports in August was \$584,000,000, or a decrease of \$62,000,000 compared with August, 1919. On the other hand, the value of our imports for August was \$519,000,000, or \$212,000,000 more than the value of imports for August, 1919.

Our exports for the eight months ended with August amounted to \$5,483,000,000, or an increase of \$211,000,000 for the same months of 1919. During the same period our imports amounted to \$4,000,000,000, or a gain of \$1,738,000,000 over the first eight months of 1919.

During the first eight months of 1919 our exports exceeded our imports by \$3,000,000,000, while during the first eight months of this year the excess of exports had dropped to \$1,483,000,000.

With this gradual decline in our export trade there is at the same time a rapid growth in our import trade which threatens the stability of many industries in this country.

Serfdom No Longer Feasible in the Cotton Industry

FOR four long years this nation was drenched in blood to establish the principle that slavery should not exist on this continent. By force of arms it was decreed that the black man should be manumitted. In an excess of zeal there was handed over to him the ballot for which white men had struggled through centuries, and he was given other political rights devised to seal forever the fact of his emancipation and confirm him in his status as a free citizen.

The humanitarian instincts of New England having thus found an outlet, it was to be assumed that the emancipation was to be complete and not political only. But no sooner had the war come to an end than New England and European countries, utilizing cotton as a raw product, engaged straightway in the profitable employment of forcing the aforesaid black man to work for nothing for them. The allegiance of the black man to his Southern master had been severed forever, but the product of the black man's toil was still to be taken from him.

The process was very simple. Before the Civil War most of the cotton was raised on large estates, the owners of which were financially able to protect themselves in the world markets, and intellectually equipped sufficiently to compete in the markets of the world with other commercial brains. The breaking up of the plantation system meant a multiplicity of small farms, worked by ignorant blacks, under a fatally bad credit system. Many who, in 1866 or thereabouts, secured original credit from factors, lived thereafter for years and never once freed themselves from debt, no matter how hard they worked. Those white men who tried to continue planting on a large scale were compelled, likewise, to pay heavily for credit, and they were forced to institute wage-scales comparable to the earning-power of the negroes who farmed their own small places, which meant a wage-scale so low that the recipients of it were forced to a condition of living not much superior to that of animals.

There became established an economic serfdom far worse, in many cases, than personal slavery had ever been. Thousands and thousands of negroes worked their entire lives without accumulating ten dollars' worth of property or having at the end of any planting season enough cash to purchase a single suit of clothes. They lived on butts and hominy, and they were thankful to Providence if they could secure enough old clothes and old shoes to keep them going. They were impoverished and the land in which they dwelt was impoverished because the thing they produced and depended on for a livelihood had been manipulated in the world markets so that the manufacturers should take not only the profit legitimately due them, but also the profit morally belonging to the producer.

While a class of serfs was thus being produced in a great section of the nation, with the attendant evils of ignorance and crime, this Government did nothing to alleviate the conditions, but actually encouraged the sacrifice of the country's greatest export crop for the enrichment of foreigners. An international conspiracy to capitalize the serfdom of the South and retain it as a serfdom operated successfully for more than half a century, and it is still operating.

A scale of prices such as was habitual before the war for

cotton was based and could be based only on the existence of millions of serfs. When any man tells you that 15 cents or 20 cents is a fair price for cotton now, or was a fair price for cotton at any time in the past, he is telling you that he believes the labor of the South ought to be serf labor, and that every black man in the South is entitled to second-hand clothes only, to a hut without windows, and to a perpetual diet of butts and hominy, and that the small white farmer must work on the same plane.

For more than half a century, the economic policy of the Government has been, with few exceptions, for the protection of American industry and, therefore, of American labor. This has resulted in a wage-scale in the industrial sections higher than obtains anywhere else in the world, and in a standard of living that is the pride of all good Americans. The North and West have rightly refused to meet the Oriental on equal wage terms, and they have insisted, as they should have insisted, against ruinous competition with Slavs, Italians or others, whose standard of living was of a scale no Americans would care to countenance. This theory of protection, which has enriched whole sections of the country and the people in them, have never been applied to the South, for, by some trick of fate, the South itself has played into the hands of the exploiters and into the hands of New England and British manufacturers, by insisting on free trade and the competition of its labor with the lowest-priced labor on earth—Indian and Egyptian labor.

It is an economic impossibility for the South to sustain a standard of living comparable to that existing in the North and at the same time meet the Orient on equal wage terms. It is not a question of belief or argument, but of fact. Unless, therefore, the nation as a whole is reconciled to the idea of maintaining in its midst some millions of serfs, and unless the South itself wants such a population, the time has come when the physical emancipation of the blacks must be followed by their economic emancipation, which would mean the emancipation also of the white people of the whole South. This can be brought about readily by the enactment of conservatory laws which, in recognition of the difference between American and foreign standards, will establish differentials sufficiently broad to assure a price-maintenance that will permit the payment of wages in the South comparatively as high as those paid in the North. This in turn means the building up of the cotton industry on an entirely new conception of cost of production, or abandonment of the industry entirely as suited only to Oriental countries and those parts of the earth where the laboring man is content to be but little better than the draft animals.

If it be true that world conditions make cotton worth but twenty cents the pound or less, and if that is a settled fact, then there is no place in this country for the growing of cotton. It is a crop of poverty and ignorance with which decent men should have nothing to do. But if, on the other hand, cotton is a world necessity of which this nation has a monopoly, and it is worth producing, then let those who produce

it demand a living profit from it, and get such profit or be done with it forever.

The question is larger than the devastating policies of the Reserve Board and Secretary Houston, both of whom seem to favor serfdom. It is larger than partisanship. It becomes a world-wide issue, and the British so recognized it last year. They are frantically trying to create new areas of cotton production, where labor is cheap, because they know that the era of serfdom in America was definitely ended by the war. The price of cotton can be beaten down, but men cannot be beaten into planting it at a loss. The ruinous prices now current, if continued, will mean the abandonment of millions of acres of cotton and the beginning of the end of cotton as a great industry. The Carolina indigo industry is gone and the Atlantic coast rice industry has terminated and quit. So shall it be with cotton unless the nation protects the industry and protects the labor that makes the industry.

The serfs learned much during the war. They learned they could earn big prices in the North and in the cities. The farm has no lure for them. The poverty of the cotton fields does not attract them. They have found a way out and they are taking it. Let those who will rejoice at the pauper prices now paid for cotton; but they are rejoicing at a funeral, and the sounds of protest that reach them from the South are the forerunner of a day when the South will be economically free, even if to bring about that condition it becomes necessary not to raise one solitary pound of cotton.

TWO REMARKABLY STRONG STATEMENTS IN BEHALF OF PREACHER AND TEACHER AND AGAINST LAWLESSNESS.

REV. NEWELL DWIGHT HILLIS in a letter to the MANUFACTURERS RECORD referring to two recent trips to Marion, O., made for the purpose of seeing Senator Harding, said:

"I was very much interested in many things that Senator Harding said, but in nothing more than his statements about the economic wastes of lawlessness and his tribute to the influence of Christian preachers and teachers who made the Western Reserve men what they were. I thought it would be interesting to my children to have them, and so I asked the Senator to sign these two statements that I am sending you. They have been published nowhere. I have put the originals in my safe for my children, but you are at liberty to republish them in any way that you desire."

One of these statements which Senator Harding prepared and signed in order that Dr. Hillis might be able to retain them for his children is a superb presentation of the importance of the preachers and teachers of this country and of adequate remuneration for them. It is in no way whatever a political statement, but it is assurably one which every man and woman, regardless of political affiliations, must heartily endorse. It is as follows:

THE IMPOVERISHMENT OF THE REPUBLIC THROUGH THE STARVING OF THE AMERICAN PREACHERS AND TEACHERS.

"One of the builders of this Republic was Daniel Webster. In massiveness of intellect he has never been surprised, and many jurists, like Rufus Choate, have held that Webster has not been equaled. Every school boy knows the oration of Webster's reply to Hayne. Indeed, the Civil War was a fighting to the finish by soldiers of the battle that began between Webster and Calhoun. Webster insisted that the Union was supreme and the State only a member of the body politic, and therefore it was Webster who was the real leader of the war for the Union. But there was another speech by Daniel Webster of only less significance to the people of the Republic. I refer to his argument before the United States Supreme

Court with reference to the church and school and their vital relation to the progress of the American people. And when I remember Daniel Webster's statement that 'never in history have the life-giving waters of civilization sprung up save in the pathway of the Christian ministry,' I am not without apprehension for our future, in view of the fact that more than 100,000 school teachers out of 600,000 and about 20,000 ministers out of 150,000 have, within a comparatively brief time, been starved out of their professions. The Republic itself is impoverished when its ministers and its educators are starved. Our first business is to train the children and youth of the nation, and these teachers and preachers should have a support equal to their full mental equipment, not alone through books and magazines and freedom from financial worry, but through travel and an opportunity to acquaint themselves with literature and art and politics, and the resources, not alone of our own country, but of the historic lands in whose soil our free institutions have their roots."

Surely this tribute to the ministers of the Gospel and to the teachers ought to awaken the entire country to the need of adequate remuneration for the two classes of workers who are doing the highest work of man's advancement in all the world. Upon the preachers and the teachers rest the extension of the Gospel of salvation and the training of the children, and upon these two things depend the existence of this country in the coming years. Upon the preacher and the teacher rests the responsibility as to whether America shall go on as the beacon light of the world and be saved from the dangers of Bolshevism, or whether it shall go down into blackness and ruin. No other influence can possibly be so great to safeguard the future of the country as the work of the preacher and teacher, and yet they are the most poorly-paid people in the land. They have, indeed, been impoverished and starved by the niggardliness of the men in the pews and by the taxpayers. The men in the pews have never adequately recognized financially the work of the pulpit; the taxpayers have always kicked against an adequate remuneration for the teachers, regardless of the fact that upon the teacher depends to a very large extent the future of their own children.

We wish that Senator Harding's statement could be bulleted in big type in every street car and in every place where men gather throughout the entire land.

The other statement by Senator Harding deals with the question of lawlessness. It is:

THE ECONOMIC WASTES OF LAWLESSNESS IN OUR COUNTRY.

"Unfortunately, my discussions here are of necessity chiefly concerned with domestic politics and international problems, and yet the fundamental issues of the hour are issues that concern the soul of the American people. The economist traces the wastes of the nation to war, class hatred, drunkenness, theft and industrial collisions, but in the last analysis all of these losses begin with the disobedience to the Constitution and to those laws that are older than our Constitution, namely, the laws of Almighty God. David Livingstone once called slavery 'the open sore of Africa,' but truth compels me to say plainly that the 'open sore' upon our body politic is named lawlessness. During these critical days my earliest waking thought, my latest thought before sleep and my deepest inquiry during all the intervening hours is this: 'What can we do to stay the dark flood of immoralities that our judges say has swept over our land?' Could all our people be induced to obey the laws of the Constitution and of Almighty God, this nation would have a new birth of freedom, and enter upon an era when poverty and unrest and every form of crime would be unknown. By reason of the limitations of my time and strength I am unable to discuss all these fascinating themes, and therefore here and now I ask those men and women who should be the leaders and guides of our thinking to take advantage of this strategic moment, when the public mind is plastic, for the full discussion of the great question of the day, for the upbuilding not alone of intelligence and wealth, but also for the strengthening of the morals and character of the American people."

Lawlessness is perhaps the greatest danger to America. Not simply the lawlessness of the Bolsheviks, but the lawlessness of men and women who would be horrified if di-

rectly charged with being instrumental in creating a Bolshevik spirit. Men are defying the nation's laws because, forsooth, they say they do not agree with the wisdom of the law. The man who takes that position, whether he be violating the prohibition law, or whether he be a party to a lynching and murder, whether he be a breaker of the speed law for automobileists, is to the utmost extent of his ability in violating the law developing in others a spirit of lawlessness which endangers the existence of our country.

Men are, as Senator Harding said, defying the laws of Almighty God, defying the laws of our own country, defying every moral and legal law which does not accord with their

views, and the spirit abroad throughout the country is one of exceedingly dangerous lawlessness.

In this statement given to Dr. Hillis by Senator Harding, as in the other which we have just quoted, there is no word of politics, but one outstanding call where recognition of the supreme importance of a law-abiding people complying with every law whether it suits their own individual interests or not. The law of the land so long as it stands on the statute books is supreme; the violator of it, whether he be great or small, is a criminal, and in violating the law he is murdering or lynching the very sovereignty of his State and of his nation, and the protection of himself and his family.

Coal Shortage a Menace to Industries of Many Nations

Of foremost rank of all the problems facing the industrial nations of the world is the fuel shortage. Only two countries—the United States and the United Kingdom—are assured of sufficient coal to operate their industries at capacity during the coming winter, according to Joseph A. Broderick, vice-president of the National Bank of Commerce, New York. In order to insure an adequate supply, a definite limit has been placed by Britain on its coal exports, and exports of coal from this country have been restricted by measures taken to assure domestic needs. In an article on the "International Coal Trade" in the October number of *Commerce Monthly*, issued by his bank, Mr. Broderick points out that although eventually a balance will be reached between demand and production, this cannot be hoped for in the near future. He states that neither shipments from new and remote fields nor the increased use of oil, hydro-electric developments and other substitutes will solve the problem for the present.

The article indicates that at the present rate of monthly receipts, not a single importing country in Europe or South America is receiving a supply which is even approximately adequate. France is now receiving coal at about two-thirds the rate which would be necessary to assure operation of French industries at capacity; Italian receipts are about three-fifths of the estimated necessary amount; the Netherlands is receiving only one-third the amount of coal required by its industries, and Norway, approximately one-half. The situation is said to be no better in the case of the other chief European and South American buyers in the international market.

The international coal trade is dominated by the United Kingdom, Germany and the United States, these three countries formerly furnishing 97 per cent of the coal imports of other nations. World production of coal in 1919 is estimated by the United States Geological Survey to have been 1,150,000,000 tons, only 10,000,000 tons above the output for 1910, and 170,000,000 tons below the output of 1913, the maximum year thus far. Mr. Broderick says that had the average annual rate of increase from 1910 to 1913 of about 5 per cent per year been maintained continuously to 1919, world production in 1919 would have been more than 1,750,000,000 tons, or 600,000,000 tons in excess of actual production. Emphasis is given to the fact that it is not to be concluded, because production in 1919 was far below what it might reasonably have been, except for the intervention of war, that the world was last year short of coal nearly to the amount of 600,000,000 tons. Rather, he believes, this huge disparity is, perhaps, the most graphic measure we have of the industrial disorganization wrought by war. Destruction of war reduced the world's capacity not only to produce coal, but to use it.

The shortage of coal in the international market, he asserts, is only a small part of the difference between actual production and probable output had the war not occurred; but when measured in terms of the effect on the countries which are suffering this shortage, it is acute, and the only hope of meet-

ing it lies in the productive capacity of the United Kingdom, the United States and Germany.

Production of coal in the United States, Great Britain, Germany and France, from 1913 to 1920 is given as follows:

PRODUCTION OF COAL.
(in millions gr. tons)

Year	United States			United Kingdom			Grand Total	
	Bitumi- nous	Anthra- cite	Total	Germany	Total	France		
1913	427	82	509	287	188	984	40	1024
1914	377	81	458	263	159	883	29	912
1915	395	80	475	253	144	872	20	892
1916	449	78	527	256	156	930	21	960
1917	493	89	582	248	165	996	28	1023
1918	517	88	605	228	158	901	29	1020
1919	409	77	486	230	115	831	22	855
1920, est. [†]	470	78	548	237	122	907	[‡] 32 ^x	939

* Saar production included with that of Germany in 1919, but with that of France in 1920.

† On basis of production for eight months.

§ On basis of production for eight months with no allowance for effects of anthracite strike.

¶ On basis of production for 33 weeks.

‡ On basis of production for six months.

x On basis of production for five months.

The figures given for the United States and Great Britain are as published in official returns. German lignite production is excluded from this table, while France, by far the heaviest coal-importing country, is included because of the difficulties of adjustment of production data for past years between France and Germany. American production of anthracite is included in the table. Production figures for 1920 are wholly estimates, but it is not believed likely there will be any notable increase in the rate of coal production in the immediate future. On the basis of production for 1920, the combined output of these countries will be 85,000,000 tons below the 1913 production.

The United Kingdom has been the foremost coal-exporting country in the world. That country is a heavy importer of foods and raw materials for manufacture, and has most skillfully utilized coal exports as going cargoes in return for such commodities as grain and iron ore.

These exports have been widely distributed and were as follows:

	1909 TO 1913.		
	Five-year average, tons	1919, tons	1920, Jan. to July, tons
Coal exports.....	65,521,000	35,250,000	16,529,000
Bunker, vessels in foreign trade.....	19,565,000	12,621,000	7,930,000
Total	85,086,000	47,271,000	24,459,000

On the basis adopted, that limited British exports, in order to protect its own market, coal exports for the year exclusive of bunker coal, Mr. Broderick says, cannot exceed 25,000,000 tons, or seven-tenths of the British exports for 1919, and less than three-eighths of the average exports for the five years, 1909 to 1913.

Germany, before the war, was the second coal exporting country in the world. The average annual export of coal from Germany, from 1909 to 1913, was 27,459,000 tons, and in addition, the average coke export was 4,805,000 tons, as reported

by Mr. Broderick. Germany agreed to possible coal deliveries approximately as follows for the first two years following the acceptance of the treaty:

First year	Tons
to France	27,000,000
Belgium	8,000,000
Italy	4,500,000
Total	39,500,000
Second year	
to France	27,000,000
Belgium	8,000,000
Italy	6,000,000
Total	41,000,000

However, the present German situation is difficult to gauge. Under the protocol of August, 1919, Germany was to make deliveries to France at the rate of 1,600,000 tons a month, but total German deliveries of coal to France to May 30, 1920, were only 4,281,000 tons, and the total deliveries under the terms of the treaty to May 30, 1920, were 5,100,000 tons. This unsatisfactory situation made necessary the Spa conference, at which the German Government undertook to place at the disposal of the Allies for six months, coal at the rate of 2,000,000 tons per month, and from latest reports it is likely that the 6,000,000 tons demanded for August, September and October will be delivered.

German coal consumption, before the war, was about 145,000,000 tons per year. German coal consumption today is estimated at about 125,000,000 tons which, however, states Mr. Broderick, makes no allowance for expansion of plants between 1913 and 1919, and likewise no allowance is made for the fact that because of shortage of raw materials and credit to buy them German industry could not now operate capacity even with unlimited supplies of coal. Production of German lignite as present is estimated at about 103,000,000 tons.

While German coal deliveries to France and the other countries at the rate provided by the Spa agreement will be of importance, their supplies will not be adequate, and other countries outside of this group cannot hope for relief through German coal. Therefore, there remains only the United States to look to for supplies by those countries formerly dependent upon Great Britain and Germany for coal.

The total exports of coal from the United States, five-year average, 1910-1914, 1918, 1919, to July 31, 1920.*

	1910-1914.	1918.	1919.	1920.
	Five.	Average.	Jan.	to July
Bituminous coal exports....	13,750,000	19,956,000	17,959,000	15,440,000
Bunker, vessels in foreign trade	7,020,000	5,532,000	7,343,000	5,022,000
Total bituminous.....	20,770,000	25,488,000	25,302,000	20,462,000
Anthracite coal exports....	3,533,000	4,436,000	4,443,000	2,794,000
Grand total.....	24,303,000	29,924,000	29,745,000	23,256,000

*Average relates to fiscal years ending June 30; other years are calendar years.

The present position of those countries which are buyers of coal in important amounts in the international market are summarized in the article as follows:

ESTIMATED REQUIREMENTS AND SUPPLIES OF CHIEF COAL IMPORTING COUNTRIES FOR 1920. (in thousands of gross tons)

Country.	Estimated consumption (including coke.)	Estimated production	Deficit to be supplied by imports.		Approximate monthly rate of imports to latest available date of current year.
			Total for year.	Rate per month.	
Argentina....	4,000	.....	4,000	333	135
Brazil.....	2,300	.....	2,300	192	83
Canada....	32,000	13,000	19,000	*1,583	*1,026
Chile.....	2,750	1,220	1,530	128	†
Denmark....	3,500	.....	3,500	292	170
France....	70,000	32,000	38,000	3,167	2,009
Greece.....	400	.....	400	33	25
Italy.....	12,000	12,000	10,000	833	513
Netherlands....	13,270	\$5,270	8,000	667	\$235
Norway.....	3,000	.....	3,000	250	129
Portugal....	1,200	.....	1,200	100	25
Spain.....	8,000	7,000	1,000	83	27
Sweden....	5,500	400	5,100	425	205
Switzerland....	3,450	.....	3,450	288	130

* Including coke and anthracite. Monthly rate of little significance

as this movement is seasonal, due to the fact that navigation on the Great Lakes does not open until April 1.

† Not available; serious fuel shortage but considerable substitution of oil for coal.

‡ Principally lignite.

§ Including a relatively small quantity of lignite.

This tabulation is composed necessarily of estimates based on the latest available information, says Mr. Broderick, and may be subject to much modification by the close of the year. He believes they serve to present in brief form the situation as it appears at this time. Coke is included, reduced to coal equivalent on the basis of one and two-thirds tons of coal to one ton of coke.

In conclusion, Mr. Broderick says:

"Ultimately a balance will be attained between consumption and production; but it does not appear that this can be hoped for in the immediate future. The international coal shortage is one of the most serious results of the wastefulness of war."

A FORMER IRONWORKER.

ONLY when the veil is drawn aside for a view of labor conditions in the great industries a few years ago is it possible to appraise the full iniquity—the ignorance or the malevolence—of those who would incite enmity among the workers against the employers of labor in these days. Very illuminative, therefore, is a letter lately sent to Judge Gary by a former ironworker. The letter was written by a man who began as a boy in a furnace, working for 10 to 12 hours at a shift, for 50 cents a day. At that time no attention was paid by the employers to the well-being of the workmen. "While at work," says the writer, "if anyone was injured, no matter how seriously or painfully, there was no provision made by the company for the suffering one, not even first aid. Such a one was never visited, not even so much as inquiry made. All the machinery was exposed. If someone was killed there was no inquest, no thought of preventing a like occurrence by putting up protection. There were no reading rooms; no bathing facilities, no entertainment, no encouragement for a boy to try to make good."

And yet, as showing the triumph of inherent character over conditions which would be denounced as intolerable by even the conservative among labor leaders of today, the young man educated himself on his savings and has been a minister of the Gospel for 30 years.

In contrasting conditions this minister, the Rev. John Weidley, aptly says: "How good it is of the employer today, instead of cuffing the boys and cursing the men, to make it possible for them not only to have a decent wage, but to furnish for them some of the finest comforts, recreation, diversion, inspiration, and best of all, a heart that beats in sympathy and even love for them and theirs!"

Contrast this opinion with that of W. Z. Foster, the agitator and organizer of the abortive steel strike, and of his sympathizer and abettor, the Rev. Richard W. Hogue, who picture the employes of the United States Steel Corporation as "slaves of capitalism"!

The letter follows:

MR. ELBERT H. GARY.

New York.

My Dear Sir:

I am in receipt of several copies of your address at a meeting of The American Iron & Steel Institute, New York, May 28, 1920, and also the pamphlet illustrating "welfare work in the steel industry." I read them through with a great deal of interest. They brought vividly before me the experiences I had as a lad and a young man in mill work. My first work was that of a "pull-up" at a bar-mill heating furnace for 50 cents a day, beginning at 3 o'clock in the morning, quitting at 3, 4 and 5 o'clock in the evening. My next promotion was to that of "straightener" at an eight-inch quide mill. From that I went through every position till I became a "rougher-up." When I was 21 years of age I resigned, and started for a preparatory school, carrying with me my last's month's wage, \$75, which was sufficient to pay

tuition, room rent, books and board for one year. The summer vacations were spent in the mill to get sufficient money to pay for the next year at school.

My reason for writing the above is to make note of the change in conditions for working men from that of 45 years ago to what they are at the present time. Then not the slightest interest was taken in the boys and men. The loafing place for us boys after working hours was in the mills, mainly with tramps, listening to their stories and watching them at their tricks, which they would perform for a little bit to eat. I have seen as many as 50 tramps sleeping by the warm furnaces on cold wintry nights.

While at work if anyone was injured, no matter how seriously or painfully, there was no provision made by the company for the suffering one, not even first aid. Such a one was never visited, not even so much as inquiry made. All the machinery was exposed. If some one was killed there was no inquest, no thought of preventing a like occurrence by putting up protection. There were no reading rooms; no bathing facilities, no entertainment, no encouragement for a boy to try to make good.

After graduating from the Theological Seminary my first place

of labor was in Pittsburgh, East End, in 1891. I was there at the time of the Homestead strikes and riots; at the time of the industrial panic; and then beginning with President McKinley's administration there came the upward trend, which has been growing better ever since.

Forty years have passed since I quit the mill for college, but my interest of those days abides. I can yet hear the rattling of the rolls. At night my dream of work in the mill is as real as if I were back again in those far-off years.

How good it is of the employer today, instead of cuffing the boys and cursing the men, to make it possible for them not only to have a decent wage, but to furnish for them some of the finest comforts, recreation, diversion, inspiration, and, best of all, a heart that beats in sympathy and even love for them and theirs!

I wish in this way to give expression to the feeling I have for the manner in which you and those associated with you treat the men who make it possible for your great industrial concerns to be so signally successful.

Fraternally,

(REV.) JOHN WEIDLEY.

Where Do You Stand on a Great Moral and Economic Issue?

FTER 25 years or more of vigorous work in all parts of the country against the fearful curse of the liquor traffic, the Prohibition Amendment was adopted by a very large majority of the States. The question was not a new one. It had been before the country actively and aggressively. Prohibition had been advocated by the leading bankers and financiers and manufacturers and railroad presidents of the country on economic as well as on moral grounds. The work of the churches and prohibition advocates would, we believe, not have been successful for many years to come if the great business leaders of the country had not taken an active stand in behalf of prohibition as one of the great issues of the hour from the moral and economic standpoint alike.

We should ever remember that a thousand men, such as Judge Gary, Frank A. Vanderlip, Thomas A. Edison and others of their standing, signed and sent to Congress a petition for prohibition, which reads as follows:

"In view of the scientifically proved unfavorable effects of the use of alcoholic beverages even in small quantities;

"And in view, therefore, of the colossal, physical, mental, moral, economic, social and racial evils which the manufacture and sale of alcoholic liquor entail;

"And in view of the inadequateness of all methods hitherto employed to check or regulate these evils;

"And in view of the great and rapid growth of public knowledge and sentiment on this subject as shown by anti-alcoholic agitation and legislation through most of our national area:

"The undersigned believe the time has come for the Federal Government to take steps looking to the prohibition in the United States of the manufacture, sale, import, export and transport of alcoholic liquors."

The country now faces a great danger in the possibility of legislation which would destroy the results of the Prohibition Amendment. Every influence of the liquor interests in this country and abroad is concentrated upon electing men to public office who will by their votes, or by their failure to vote, bring about the killing of the Volstead Act for the enforcement of prohibition, or even perchance repealing the Prohibition Amendment itself, if they can possibly effect that.

To his everlasting credit be it said that Hon. Wm. G. McAdoo recently issued a statement in regard to this issue, in the course of which he said:

"I know from my experience as Secretary of the Treasury that no law which provides for a drink containing a certain percentage of alcohol can be successfully enforced. If the law should permit thousands of breweries and wineries to be reopened throughout the land and to manufacture beverages with a specified alcoholic content, it would be impossible to prevent the manufacture of those beverages with a larger percentage of alcohol than prescribed or to prevent adulteration after manufacture, and the effect would be to nullify the prohibition amendment."

"Even if the saloon itself were not reenacted, light wines and beer would be sold at every soda fountain, at every lunch counter, and in every restaurant and hotel. It is a notorious fact that drunkards begin by drinking light wines and beer when young,

and as the appetite grows, the desire for strong drink is developed. If we turn loose upon the country light wines and beer, we have destroyed the prohibition amendment and brought back upon humanity a curse greater than war itself. The greatest victory ever achieved for helpless women and children would be thrown to the winds.

"It required a two-thirds vote of the Congress to submit the prohibition amendment to the States. It then required three-fourths of the States to ratify the amendment in the Constitution. Forty-five States have ratified the amendment.

"If Congress can, by mere majority, vote with the approval of favoring President to license beer and light wines, then prohibition, which required a two-thirds vote and a Presidential approval, plus the consent of three fourth of the States, can be nullified by a majority of the Congress with the approval of the President, and the breweries and wineries know this fact."

Mr. William J. Bryan in a recent issue of his paper has stated the case in very vigorous language. He and others who for years have fought the accursed liquor traffic, with all of its fearful crimes and its control of rotten politics, realize that the liquor people are doing their utmost to elect men to Congress who will co-operate in killing prohibition or the effective administration of the prohibition law. Mr. Bryan, discussing this matter recently, said:

"The progressives had no chance in the Democratic convention this year. The Administration presented no economic issue upon which a division could be made. Those who spoke for the President made the endorsement of the treaty without reservations the dominant, in fact, the only, test. Nothing could be done or said that could in any way be construed as a reflection upon the Administration or as a suggestion of improvement.

"**Nearly a third of the delegates at the Democratic convention seemed to be interested in nothing but the liquor question.**"

That Governor Cox was nominated through the power of the liquor interests of the country admits of no question. Every man who knows the influences that were back of the nomination knows that the controlling powers were the men identified with the liquor traffic, and Mr. Bryan states it accurately when he says "nearly a third of the delegates at the Democratic Convention seemed to be interested in nothing but the liquor question." It was the power of these delegates, numbering one-third of the whole convention, which, sticking together under the domination of the liquor interests, finally threw the nomination to Cox. Whether Mr. Cox will come out and avow his opposition to the liquor traffic or not we do not know, but since he has been identified with the liquor-traffic influences for many years, and as it was the liquor-traffic influence that nominated him, people who believe in prohibition and in the elimination of the whole liquor business from dominating power in American politics, with all the rotten influences which have been at work for many years on the part of the saloon interests to control the politics of the country, must face the question as to how their vote shall be cast. Certainly it behooves the country

to see that, regardless of party, every Congressional candidate who represents the wet interests shall be overwhelmingly defeated.

The prohibition question is not simply one of morals. Every business paper has a right to discuss the subject from that point of view alone. But when it becomes a great economic issue as well, and when it threatens to endanger the safety of our Government itself, it is the duty of business papers, as of all others, to stand for prohibition in its broadest sense and for the full enforcement of the Prohibition law, and the MANUFACTURERS RECORD has no apologies to make for its relentless fight against the liquor traffic.

THE SOCIALISTIC CAMPAIGN SHOULD BE MET.

Editor Manufacturers Record:

I want you to know, and believe that Dr. Hillis should know also, that his paper in your issue of September 23 appeals to me as one of the most stirring articles I have ever read.

I have no doubt that he has portrayed the situation correctly, and as such we have on our hands in this country one of the gravest menaces which has ever confronted us. It is high time that the people of this country became aware of this awful situation. I believe that the widespread dissemination of facts such as these are a public duty. Men of large means could not do better than to distribute thousands of copies of articles like these over the country to wake us from our lethargy.

F. M. WEEKS.

2040 East 96th Street, Cleveland, Ohio.

We quite agree with Mr. Weeks that the article by Dr. Hillis should be widely distributed throughout this country.

It is indeed true that we are facing a desperately dangerous situation. Our people do not apparently have the slightest realization of the amount of Bolshevik, socialistic, anarchistic propaganda that is being put out everywhere in America, largely paid for by Russian funds.

The vast wealth of Russia, a country three times as large as the United States, with a population of over 150,000,000, a country of almost infinite resources, is being used by Trotsky and his crowd of renegade Jews to carry on a Bolshevik campaign throughout the entire world. We use the word renegade Jew advisedly, because the Jewish race has, through the centuries, been a God-fearing people, whereas the renegade Jews of the Trotsky type proclaim a definite denial of God and would seek to destroy all churches and all synagogues alike.

The statement has recently been made, and we believe is correct, that about 85 per cent of the members of the Russian assembly, which controls and dominates that vast country, is composed of socialists from the East Side of New York, who followed Trotsky back to Russia. With this almost limitless power at their command, they are using the vast wealth of that country, robbing churches of their treasures, selling the crown jewels and taxing the people to the extreme, not only that they may loot the public and enrich themselves, but that they may carry on a world-wide campaign of Bolshevism. Their agents are all over America. Many of them are doing their work, whether in their pay or not, who are posing as preachers and teachers and editors. The man who today is preaching a socialistic doctrine has taken the first step down the road to that hell of Bolshevism which proclaims that there is no God.

The night before he sailed for Russia Trotsky urged his followers in East Side New York "to keep on bringing on one revolution and another in this country until they overturned the dirty, rotten American Government, while he went to Russia and brought on a revolution there and stopped the war against Germany." With his intimate acquaintanceship with America, gained through the years while he was living here, Trotsky, or Braustein as his true name is, knows just where

to place his hands upon the agents who can carry on his work, and these agents are found in many places, under many disguises. They are working to turn the negroes of the South into Bolsheviks. They are working in nearly every factory in America, seeking to arouse a hatred of employers and preaching by word of mouth and by leaflets and newspapers the doctrine of Bolshevism. Many of their co-workers are in the pulpit, in the press and on the political platform.

Notwithstanding this situation, the people of the country at large seem to be living in a fool's paradise, little comprehending the danger which confronts them.

THE REASON FOR THE PROTECTIVE TARIFF CONGRESS AT NEW ORLEANS.

MR. GEORGE W. ARMSTRONG, of Natchez, Miss., chairman of the committee which is called the Southern Tariff Congress, in an article in this issue in regard to the reason for the congress, says:

"It is now the producer that needs protection and not the manufacturer.

"The competition of oil from the soy and velvet bean of China and Japan has lowered the price of cotton seed from \$75 to \$25 per ton.

"The competition of rice from these countries has put the price of rice from \$12 to \$6, and has made the production of it unprofitable.

"The competition of wool and mutton from Australia and New Zealand has made wool unsalable and sheep raising unprofitable.

"The competition of beef and hides from South America threatens the extinction of the cattle industry. Cattlemen, with few exceptions, have lost money every year during the past six years; many of them are broke, and all of them are very much discouraged.

"It is now within the power of the American packer who controls the supply in both North and South America to manipulate the market to suit his own purposes. There are others of our industries that will need protection under normal conditions.

"The success and development of these basic industries is essential to the prosperity of this country in peace, and to its strength and success in war. It will be a sad day for us when we become an importer of food and must rely on other countries for our supply. It will mean that the favorable trade balance, upon which our prosperity is largely founded, will disappear; it will mean still higher cost of living. It is folly to expect the farmer to continue farming and to continue producing at a loss. We must assure him a stable and a profitable market for his products, or pay dearly for our failure to do so."

In another letter Mr. Armstrong adds:

"I am taking the responsibility of expressing my own views as to the scope of this meeting at New Orleans, which I think should result in the permanent organization of a Southern Industrial Congress or Chamber of Commerce to handle economic questions affecting Southern industry and agriculture. Several Southern organizations have sent committees to Washington to seek relief from the Federal Reserve Board. It occurs to me that all of the industries of the South should be represented at this meeting at New Orleans, and should present in some manner their views regarding this important question, first to the Federal Reserve Board, then to the President and his Cabinet, and if necessary finally to the Republican and Democratic nominees. Their combined power will necessarily be greater than that of any single industry. In the belief and the hope that the New Orleans meeting will result in some such organization, I have prepared for publication in accordance with your request the enclosed article."

Some Do Not Want to Be Saved.

DR. J. R. BLACK, Marked Tree, Ark.—Enclosed find check for \$6.50, for which please mail the MANUFACTURERS RECORD one year to the following address: "J. D. Du Bard, Marked Tree, Ark." Mr. Du Bard is a banker here, and I have guaranteed that he will be more than pleased with the MANUFACTURERS RECORD or at the end of the year I will refund his money (\$6.50). I have made this proposition to a number of business men here, but everything is so "dyed-in-the-wool" Democratic, it is difficult to get them to even read anything that is at all tinged with Republican doctrine. They close their eyes lest they should see and be healed.

Three Great National Issues Clearly Stated

TWENTY years or more ago Senator Gorman of Maryland, with that far-seeing wisdom which guided him in many of his public utterances, said that the great question before America was not so much one of production as of distribution.

For 20 years the MANUFACTURERS RECORD has been seeking to drive home this truth upon the people, and warning them that decreased transportation facilities would mean enormous losses to all classes of people. Transportation, however, as we have constantly pointed out, does not depend wholly upon the railroads. We must develop our motor transportation through the building of improved highways, and we must develop to the utmost extent our water transportation.

These points are strikingly stated in a speech by Senator Harding, made last Saturday, in connection with a discussion of the farm problem, and as the MANUFACTURERS RECORD has for many years unceasingly sought to impress upon the country the whole farm situation and its relation to the nation's welfare, we believe that Senator Harding's statement of his views on the farm situation, the transportation situation and the betterment of rural conditions will be of interest to every man and woman, whatever may be their political views. In his speech on Saturday last, in discussing these points, he said:

"The first of these policies is, that as a nation we shall all do whatever we can to make prosperous the land-owning, soil-conserving American farmer. We must oppose the menacing increase of the tenant farmer, who cannot call the lands and the buildings home, and, of course, have no great concern for conserving our soil and no particular encouragement to make improvements of a permanent character.

"The reason for this tenancy is not difficult to uncover, as we have gone forward in great national growth. We have been catching up with our food production, and the time will be upon us soon, unless we do something about it, when we will no longer be feeding the world, but will experience difficulty in feeding ourselves. With the extension of farming in the United States, with increased demands for farm products, we have nearly arrived at the point which all nations experience sooner or later, that of land hunger within our borders. When land hunger is approaching, the land becomes a field for speculation by large capital; the home-owning farmer is displaced and the less permanent tenant farmer is put upon our soil.

"To meet this situation I have proposed, and will continue to propose, that whatever our Federal Government may properly do must be done to enable the private citizen, who desires either to retain the farm which he is operating or to obtain a farm to operate, to have available the capital which will prevent the land speculator, who does nothing for production or for improvement, from displacing the farmer who does everything for producing and improvement.

"The second large task before us is the improvement of the distribution of farm products. I believe that distribution, rather than production, is the more difficult of the two great problems of advancing civilization. I believe that this applies particularly to farm products, and that the nation will have profound cause for regret if ways are not found to make more swift and sure and inexpensive the passing of the yield of mother earth to hungry mouths. I stand squarely for policies which will solve our distribution problem.

"We must, whenever it is necessary, encourage to the fullest extent co-operative selling and distribution of agricultural products and co-operation buying by the consumers. I do not mean by this that middlemen, who are contributing, by their skill and specialization in distribution, a real service should not receive the protection of all of us, but I do mean that wasteful forms of distribution must promptly be abandoned, and I do say that profiteering must be squeezed out. I understand that the State of New York has found that apples which the farmer sells for one cent a pound have been retailing to the consumers in New York city at 24 cents a pound. Examples of this are manifold, and call out to us in voices to which we must give immediate heed.

"I do say that we must increase and stabilize transportation facilities and their rates; that we must deal with our railroads in the hands of private owners, who are, in fact, an army of American investors, so squarely and with such a regard for our own welfare as will bring the railroad systems of this country not only to the point where they may attract new investments

from the savings of the people in order to begin again the extensions necessary.

"No Americans more than the farmers, unless it be the consumers, have more vital interests at stake than the health and growth of our railways.

"To the railway facilities for distribution of agricultural products we must add feeders of the railways. I refer to inland waterways and motor truck transportation and the development and maintenance of roads designed for the movement of goods rather than for holiday speeding. In the development of our waterways, we must turn our backs upon the system of pork-barrel appropriations, and, under a national budget system, make our expenditures according to the counsel of a proper commission, whose aim will be to develop a true national system of inland waterways for all the American people, instead of misappropriating moneys for the exclusive satisfaction of single communities.

"Waterways transportation has never proved to be a competitor of railways, but rather a feeder of railways.

"We must do a third thing for the American farmer. When he is menaced from foreign countries by the importation of food-stuffs raised by exploited soil, or by cheap labor which knows nothing of American standards of living, or by Government subsidies given to agricultural production abroad, we must have no hesitation in protecting agriculture and horticulture, just as we have no hesitation about protecting industry by a properly adjusted protective tariff rate.

"These three policies must be the main policies accepted by the whole American people to preserve the basic industry, the industry so vital to our national warfare, our national defense and our national future that it is the first concern of the dwellers in industrial centers.

"But it is not from an economical standpoint alone that the Government must act with relation to the farmer. Everything possible to create better educational advantages, better social opportunities, to protect women and children, must be the business of the next Administration.

"We want a prosperity for the American farmer which will allow him to bid for normal farm labor. This year in many sections of the United States girls, mothers and old women have had to take up the task of working in the fields, and much of this work has been too hard to be consistent with wholesome maturity and wholesome standards of American rural life.

"We must see to it that we immediately raise the standards of rural education. We have just awakened to the fact that the education of the American child everywhere has fallen below the standard necessary for the protection of our future. We have had to face the fact that our school teachers are underpaid, and that the result among the inadequate number who can be found for service there is a menacing proportion of them who are not fit by age or training for their work. We have had to face the fact that in physical training and in the teaching of American civil government and American history and the principles of Americanism and of Americanization we have been deplorably delinquent. But nowhere, I think, is there more cause for alarm than in the fact that the annual school term of the rural school in the United States only averages 137 days a year; that four-fifths of the rural schools are one-teacher schools, requiring instruction in many grades and resulting in hasty and necessarily careless teaching. We must face the fact that illiteracy is twice as common in the country as in the city, and that the opportunity for country boys and girls to have a high-school education is all too slight."

SMALLER COTTON CROP.

BASED on conditions September 1, the Government estimated a cotton crop of 12,800,000 bales. Since that time, however, there has been a material decline, and from the condition of the crop on September 25 the Agricultural Department forecasts a production of 12,123,000 bales, compared with 11,329,755 bales ginned last season.

The condition of the cotton crop on September 25 was reported as 59.1 per cent of a normal crop, as compared with 67.5 per cent on August 25, 54.4 per cent on September 25, 1919, and 63 per cent, the average on September 25 of the past 10 years.

The Texas crop is estimated at 3,583,000 bales; Georgia, 1,532,000 bales; South Carolina, 1,265,000 bales; Arkansas, 1,116,000 bales; Oklahoma, 1,130,000 bales; Mississippi, 877,000 bales; Alabama 742,000 bales, and North Carolina, 790,000 bales.

THE MISTAKE OF JEWS IN THEIR RACIAL ANTIPATHY TO EVERYTHING WHICH CRITICISES A JEW INJURES THEIR RACE AND ALL OTHER RACES.

Hagedorn Construction Co.

Commerce, Ga., September 25.

Editor Manufacturers Record:

I have been a reader of the MANUFACTURERS RECORD for a good many years—since 1912, to be exact.

I have just received copy of the issue of September 23, and read the cover-page editorial, "Who is Responsible for the Wall Street Explosion?"

While not attempting to go into the subject-matter of what you write in this editorial, as to the pros and cons, the whys and wherefores, we do wish to express to you our very great surprise at one word you have used in this editorial, which you will find very near the bottom. The word in question is used before the name of Karl Marx, separated from it by only a comma. It is the word JEW.

It is a great injustice to the race of Jews, of whom you have yourself said in late writings that some of the best citizens of the country belong, that you use this word in the connection that you do and in the vitriolic and sarcastic manner that it is put into your editorial.

Had this name been that of any other religious sect, would you have inserted in front of it the word Methodist or Baptist or Catholic or Episcopalian, or whatever creed he had happened to belong instead of the fact that he is a Jew?

I think that the good-Jews of the country will not contend that this man, whom you mention as being of their creed, is one of whom the race or sect is proud; so are there lots of members of other creeds of whom their fellows are not proud to have their names connected with the creed. Nevertheless, it seems to me that you have used this title to this man in a way that is entirely unjustified and uncalled for, and the race of Jews, of which the writer happens to be a very humble and poor example, will not appreciate the connection in which you use the word.

There is sufficient feeling in this country against the Jewish race, for reason or not—mostly not—that editorials of this kind should not come from pens such as men of the type that you profess to be, and which are read by men of the highest class of business people—some of whom are Jews also. They do not help to create that feeling of association among people of the Jewish and other creeds that should be created and maintained, that this country can be the great melting pot that it has the reputation for being in other parts of the world. You understand that it is not the body of the editorial in reference to the explosion in Wall street nor the responsibility for same to which the writer is referring, but it is the use of the word JEW in the connection that it is used that brings a protest from him and should also bring a similar protest from every Jew that sees it.

I trust that you will get sufficient of protests similar to this one that they will have some influence with you to cause you to in some part to right the wrong that you have done to a race of people who have been always foremost in their upholding of this country's good name and honor whenever called upon to do so. That one member has been of a nature to be classed as "atheistic, socialistic and anarchistic" should not hold up the word or name of JEW to the world in the manner in which you have done so.

HYMAN HAGEDORN.

Mr. Hagedorn entirely misinterprets the whole situation. The word "Jew" refers to the race and not to the individual denomination, such as would be indicated by Methodist, or Baptist, or Catholic. The Jewish race is one of the distinct races of the world. Its history is one of the greatest miracles in all human history, and from that race came the Only Hope of world salvation. No man can possibly think of the world's Redeemer without remembering that He was born of Hebrew ancestry. The Jewish race was used by the Almighty to give the Bible to the world—that Book upon which all human civilization is founded. But the Jewish people are in many respects making a very serious mistake when they permit racial consciousness to antagonize the use of the word "Jew" in referring to the atheistic, socialistic German Jew named Karl Marx and in other similar cases. The very fact that Marx was atheistic is directly contrary to the teachings of the Jewish race, but it is important to the world that he should be known as a Jew, because that fact indicates how

far he deviated from the teachings of the Fathers, who since the days when God made that people His chosen race have been the instrument in His hands of giving to the world the Bible and giving to the world the Christ.

Trotsky is a Jew. It might have been said of Karl Marx, and of Trotsky and of others that they are renegade Jews, but the fact that they are Jews and they have gone so directly contrary to the teaching of Judaism makes unnecessary the word "renegade." The millions of Jews in this country and elsewhere who are neither atheistic nor anarchistic should stand out boldly in denouncing the people of their own race who become atheists and anarchists. They owe it to themselves and to civilization to take this stand.

Unfortunately for the world's best interests, the Jewish race, including even the good, honest, law-abiding, God-fearing Jews, have too often antagonized everything that criticised the Jew merely because they have been unwisely clannish or racial. After having subscribed to the MANUFACTURERS RECORD for some years, and often praised it for its good work, Jacob Schiff, the New York banker, a year or two ago discontinued his subscription on the ground that we had criticised his race. And when we asked him to point out the criticism, the only reply he could make was to send a letter written to him from the secretary of the Hebrew Association replying to an inquiry of his to the effect that we had published an article against the Jews with an editorial introduction which indicated that the MANUFACTURERS RECORD endorsed the position of the writer of that letter. Mr. Schiff thus showed that he did not even know what we had published, but that he had to depend upon the Hebrew Association to tell him why he should discontinue his subscription, and even that organization gave him only one instance which it had been able to find of a criticism.

As a matter of fact, the article was merely a letter from a New York business man criticising the socialistic activities of East Side Jews, and when in the correspondence with Mr. Schiff he was asked if it was his intention to uphold all of the activities of the anarchistic, socialistic element of East Side Jews merely because they were members of his race, his secretary replied that Mr. Schiff did not think it necessary to answer the impertinent question.

Mr. Schiff's action in the matter was altogether typical of the general spirit of the Hebrew race in overlooking the sins of its own people. So far as we know, no Jewish body, speaking on behalf of that great race, has criticised the fearful crimes committed by Trotsky and his crowd, or expressed any regret that a member of the Jewish race was responsible for the horrible Bolshevik chaos and the almost numberless murders in Russia. Indeed, a very large proportion, about 85 per cent we believe, of the Russian Assembly which is now controlling Russia is composed of Jews from the East Side of New York, who went to Russia immediately upon the overthrow of that Government by Trotsky and his crowd.

This Bolshevik spirit is a definite denial of God. It wants to blot God, and churches, and synagogues out of existence. The good Jews, of whom there are millions, cannot possibly be in favor of any such policy, but they make no move to voice their opposition to the crimes of members of their own race, and in failing to do this they will of necessity arouse a widespread hostility throughout the world to the entire race, to the great disadvantage of all people of all countries.

We are not at all unmindful of the great work of the Jews from the earliest days of their recorded history to the present hour. It is our privilege to count some of them among close personal friends. But when Jews like Trotsky and others commit their atrocious crimes, and when men like Karl Marx fill the world with their socialistic, anti-God, Bolshevik teachings, it is only right that the nationality, or rather, the

racial name, should be given to these people, just exactly as we would say an Italian, or a Russian, or a Pole, or a German, or a Frenchman, or an Englishman. Mr. Hagedorn has been unwise in permitting his love of his own race to cause him to take a position against the use of the word "Jew" in connection with the naming of Karl Marx and his atheistic, socialistic and anarchistic doctrines that are bringing infinite suffering and sorrow to the whole world.

GOVERNOR COX'S PLAY FOR VOTES.

IT is reported that the President is annoyed because of a statement attributed to Governor Cox to the effect that he will, if elected, go into conference with Senators and quickly reach an agreement for ratification of the League Covenant.

The President can well afford to be annoyed, for such a move on the part of Governor Cox would be a repudiation of Mr. Wilson and of everything for which he has stood. There was no time during the long treaty fight when Mr. Wilson could not, had he desired, have secured ratification of the treaty within 24 hours. He refused absolutely to listen to reservations, declined to admit the possibility of conferences, and finally vetoed ratification after the final long effort of Senator Lodge and others to revive the treaty and beat it into such shape that a decent respect for American rights would permit its acceptance.

There is no possibility of ratification if Governor Cox is elected. Quite lightly and superficially, he speaks of the League, as if those opposed to it were merely playing politics, and he seems to think that political expediency can win allegiance to it. There are more than a third of the Senators who will be in office when the next President takes his seat who are definitely and forever committed to vote against the League unless it has been modified by reservations that mean something. Governor Cox is equally dedicated to ratification with no other reservations than those that would mean nothing. Between the two points of view there is a great gulf that cannot be bridged. If there is any hope at all for ratification of the treaty it lies in the election of a President who will accept reservations with teeth in them, and so revise the Covenant that American institutions are not endangered. On any other basis the Senate is immovable.

The Cox statement, therefore, can be regarded only as one of his usual pleas for votes, for votes on any basis. His campaign, so far, has been a long series of compromises with his audiences, and his activities have been characterized by a ward-politician outlook and a ward-politician morality. In the West he is "dry," and in the East he is "wet." He is uncompromisingly for the League and he is for it with amendments. His banners float which way the winds blow. Only the game fish swims upstream; the others go with the current.

"I am in favor of going in," Governor Cox has said. He cannot now be in favor of not going in. His trip across the continent has undoubtedly convinced him that the Covenant cannot and will not be accepted as it is by the American people, and he wants to recognize that situation in time and get from it what votes he can. But those who patriotically are opposed to the Covenant, and whose hearts are wrapped up in its defeat will be deceived by no specious arguments. Cox stands before the nation as the Wilson heir, and it is the Wilson policy in regard to the Covenant that must be repudiated in the great and solemn referendum on November 2.

In discussing Mr. Cox as a possible Presidential candidate, Mr. Bryan on May 13 issued a statement in which he said:

"Cox's nomination would make the Democratic party the leader of the lawless elements of the country, and his election, if such a

thing were possible, would turn the White House over to those who defy government and hold law in contempt. There is no chance of his election, if nominated, but why should any Democrat be willing to support a man whose nomination would insult the conscience of the nation? After disgracing his State he aspires to a position in which he could disgrace the nation."

Mr. Bryan has evidently not changed his views, for with all of his long identification with the Democratic party as one of its foremost leaders he declines to support Mr. Cox, but is giving his whole time to the effort toward the election of Congressmen committed absolutely to the upholding of the cause of prohibition.

Mr. Bryan has been accepted by the people of the South, and many other sections, as pretty good authority on many phases of democratic work, and a member of the Cabinet once referring to Mr. Bryan spoke of him as "the greatest living American." Mr. Bryan's views of the undesirability of Mr. Cox as a President ought to have some weight with all thinking people.

POOR ADVICE.

IN suggesting that cotton growers are the victims of their own bad judgment by concentrating too largely on cotton, the Birmingham News says:

"The world is hungry for sweet potatoes and for genuine cane syrup, for peanuts and for tobacco, and is willing to pay for these things. Why not raise them? Why continue to feed the boll-weevil and listen to impractical schemes to turn upside down the law of supply and demand and make an artificial price for cotton?"

It looks as though the Birmingham News has very little understanding of the situation. The tobacco market is suffering just as badly as cotton, perhaps more so, and the tobacco producers are trying to find a way to carry their crop so that it may not be forced upon the market for lack of credit. They are also pledging themselves to reduce the acreage.

And as for raising peanuts, we repeat what we said last week on the question of peanuts from the United States Department of Agriculture, which made the following report to our Washington correspondent in reply to an inquiry about peanuts:

"The nominal quotations on September 10 were from 6 to 9 cents the pound, but there was no demand. The department has peanuts of its own in storage at Florence, S. C., which it would like to sell, but cannot. The market is swamped with Oriental peanuts at the ports. Only this morning there were sent to us from the Department of Commerce samples of Oriental peanuts which show conclusively that the Orientals have sent to this country and got our best seed. The industry is ruined unless there is a prohibition of imports or the imposition of a heavy tariff, and the 18 years of work done by this department will have been thrown away."

The world needs cotton more than it needs peanuts or tobacco or sweet potatoes or cane syrup, but the world is not going to buy cotton so long as Secretary Houston and the Federal Reserve Board are day after day advising the world that they propose to beat down the price of cotton and other commodities and thus notify speculators and the cotton buyers to hold off under this policy. The cotton buyers are waiting to find out just how far below the cost of production Secretary Houston and his associates will be able to beat down the price.

The same thing holds true of tobacco. And all of this chaos has come about through the definite plan inaugurated last year by the Federal Reserve Board to break down the abounding prosperity which was then enriching the nation by breaking down prices, deflating labor and everything else.

The Federal Reserve Board as now constituted has been one of the nation's greatest disasters.

A Great Leader in Cotton Manufacturing Demands

Full Bank Credit for Southern Cotton Growers

Bibb Manufacturing Co.

Macon, Ga., September 27.

Editor Manufacturers Record:

We enclose herewith check for \$2.50, and would thank you to mail us here 50 copies of "A Plea for the Cotton Growers of the South."

I have read your article with a great deal of interest, and agree thoroughly with the sentiments you express and the conclusions you have reached.

I want to say that if a copy of the letter referred to at the bottom of the seventh page of your article reached this office, it was overlooked in some way. We do not recall having seen it.

There is no certain advantage to the cotton manufacturer for the price of cotton to go so low as to create conditions that oppress the farmer. No mill manager who operates his mill on a legitimate, businesslike basis is a speculator in cotton, or would lend himself to a program of selling goods short and joining in an effort to depress the price of cotton so as to make a profit in this way. On the contrary, a serious depression in the price of cotton—and certainly one that would create conditions that oppress the producer—always operates to the disadvantage of the manufacturer, since his market is upset, his customers are uncertain and are all the while dissatisfied with any purchase they may have made. What the intelligent manufacturer wants is an even level of prices, and it is furthermore directly to the interest of the mill for the price to be one that brings the producer a fair return on his investment and for his work, because this producer and all employed by him become under such conditions steady buyers of the manufactured goods.

There are no freer buyers of merchandise than the Southern farmer when he is prosperous. This is best evidenced by the increased volume of business done in all lines in the South during the past three or four years over the only period in my recollection during which the cotton raiser of the South was able to market his cotton at a fair profit. All of us who have grown up here in the South know that we have been a debtor people ever since the Civil War, and that only within the last few years have our farmers begun to free themselves of debt, to cancel mortgages on their farms and become independent like the farmers of the West and Northwest.

As you have suggested, it takes twelve months to grow a crop of cotton, and it takes twelve months for it to be consumed. A credit to the farmer that lasts only 60 or 90 days is wholly inadequate if assistance is to be given him to enable him to market his crop as the world demands it. More than that, the banks must finance the crop in the hands of someone for practically the whole of the twelve-month period during which it is consumed. **If they do not lend the money to the farmer to carry it and permit him to market it as it is needed, then they must lend it to the factor, to the shipper, to the mill man or else to the speculator.**

Cotton is a great crop, grown in a great section of our common country and by a loyal citizenship. To my mind, it is a most egregious blunder to single out this crop, this section of the country and these people, and handicap them by refusing credit, except for a limited period, for use in intelligently marketing the crop. The same credit facilities should be extended the cotton grower that would properly appertain to any other line of business.

Money is a commodity merely, and should be purchasable by all

at the prevailing price. Credit is the very life-blood of commerce, and should be allowed to flow freely to whatever part of the commerce of the nation it is needed, and the only protection needed is the character of the borrower and the collateral offered.

Take hands off that would seek to artificially restrict or stimulate credit and the law of supply and demand can surely be counted on to regulate things in a safe and sane way.

E. T. COMER, Chairman.

Federal Reserve Board Policy on Cotton Costing the South Hundreds of Millions of Dollars.

First National Bank.

Florala, Ala., September 23.

Editor Manufacturers Record:

Your pamphlet, "A Plea for the Cotton Growers of the South," has been received and read with a great deal of interest, and while I agree with you on many statements made therein, yet I do not believe that the proper way to bring about a change in the condition of the cotton farmer is to extend him credit to "hold cotton." I have been in the banking business in the cotton belt for 15 years, and I believe I know the cotton situation and know the cotton farmers. To extend credit to the cotton farmers to hold their cotton is only to pile up the expense on them, as the insurance, storage and interest must be paid, and then eventually the cotton has to be sold at such a price as it is bringing on the market. It is utterly out of the question for the banks to carry the cotton crop and keep it off the market. It would stop themselves loaded with loans on cotton and no resources to aid other business or industry.

First of all, to help the farmer in the South, we must get him out of the habit of borrowing money to make a crop, or rather refuse to extend him credit on his crop. Just as long as a cotton farmer can borrow money on his crop before it is made, just so long will he remain in debt. To lend him money to make a crop and then to lend him still more money in the fall to buy his fall supplies of clothing and other necessities is to pile the thing up to where he will never get out.

The cotton farmer must turn to other crops along with his cotton, and he must make up his mind to go on his own resources for at least one or two years without aid from the banker, merchant or any other outside help. At the end of the second year on this basis he will own himself, and owe no one. In this country, where we have such long seasons as we do, a farmer can raise anything. He can make two crops on some of his land. He can make them cheap. He can make a living at home and sell enough produce, eggs and chickens to pay for his little purchases, and when he gets his crop made he will own it and can sell it when it suits him. There is but one remedy for him, and that is to stay out of debt instead of trying to borrow to make a crop and then borrow to hold it. He must work, and work all the time. The average farmer in this section works about half the time. He comes to town too much and wants to borrow money every time he comes to town. I am sorry to make these statements, because they are facts, and I have it to contend with every day.

There is not a country on earth where a farmer can live with the ease he can in the South if he would but manage his farm right. Now we have just a few farmers in this section who farm on a basis of no credit; men who started out with nothing, and they are now independent. They don't have to ask for credit and they don't have to sell their cotton except at such times as they see fit. We have farmers here who have cotton they have had since 1914—to their sorrow they still have it. They are farmers who plant a small amount of cotton each year, but just plant it for a side line and keep it and sell it when they think the market is good, but they don't have to sell it at all. They make a living without it, and have money ahead. But this class of farmers are few and far between.

The bankers of the South have done everything in their power, especially the small country banker, to get the farmers to quit the one-crop idea and get on a living basis. They have offered to assist them in every way to get to farming on this basis, but the high price of cotton for the past few years keeps them on the old system. We got them started to diversifying after the cotton crash in 1914, and they made money in 1915, 1916 and 1917, but went wild on cotton in 1918 and 1919, and the boll-weevil ate it

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up as usual, and today they find themselves in debt worse than ever, and no crop. We are starting another campaign to get them back on a safe basis, and for your information, and thinking it might be of interest to you, I am enclosing a program which has been worked out and which is being distributed by the bankers throughout Southeast Alabama. A farmer who will take this program and stick to it for five years will get out of debt and get ahead, but we will not be able to get all of them to adopt this program, but think many of them will do so.

I do not believe that so much agitation about Wall Street and Europe trying to steal the cotton and trying to depress the prices etc., will ever remedy the situation. It only tends to stir up strife between the producer and the manufacturing interests, but if the farmers get away from cotton as the main crop and begin to make a living and then make a little cotton, the problem will be solved, and it will not be necessary to lend the farmer money for speculative purposes to hold cotton for higher prices, but the other fellow will have to beg banks for credit to get enough money to buy a few bales, as the farmer will have the cotton and owe no one, and he will not have to sell it until he gets good and ready.

B. H. MEADOWS. Cashier.

[The MANUFACTURERS RECORD fully agrees with the position stated in the foregoing letter in regard to the importance of diversification of farming. We trust that every bank in the South will co-operate to the utmost extent in encouraging farmers to live at home and no longer to depend upon the West for their feedstuffs and foodstuffs. It is entirely true that the cotton farmer must turn to other crops. We have been preaching that doctrine for more than a quarter of a century. Until the Southern farmer breaks away from his worship of cotton and raises all of his own foodstuffs, and makes cotton wholly a surplus crop, he will never have full control of the value of his product, nor will the South as a whole secure its best development.

When one travels through the sections of the East and the West where diversified farming has brought forth abounding prosperity and contrasts the poverty of the all-cotton sections of the South, his heart grows sick as he thinks of what the Southern farmer is losing of the good things of life to which he is entitled, but which he has not gained, because by concentrating so much of his effort on cotton he has given to the cotton buyers of the world the whip-handle over the value of his product.

Nevertheless, we still believe that the Federal Reserve Board and the bankers under its control are causing a very great and unnecessary loss to the Southern cotton grower by refusing to grant him the credit to carry the cotton through the 12 months needed for its proper marketing. The knowledge that the Federal Reserve Board had determined to reduce credits has given the long-desired club to the cotton buyers with which to beat down the price of cotton.

The purchase of cotton by the mills and speculators under the condition which has been created by the Federal Reserve Board inures to the loss of the cotton grower, and thus to the loss of the whole South, while bringing great money-making opportunities to the cotton buyers. The Federal Reserve Board is in this way costing the South hundreds of millions of dollars which will never be recouped, but the cotton buyers in other sections and in Europe will reap this profit, to which they are not entitled by any law of supply and demand.

They are only able to win this gambler's profit by reason of the determination of the Federal Reserve Board to force down the price of commodities, cotton included, under a mistaken idea that this is the way to secure prosperity.—Editor Manufacturers Record.]

Agricultural and Livestock Interests Victimized.

[The Waco Times-Herald.]

Our agricultural and livestock interests are also being victimized by the policy of the Federal Reserve Board. By withholding credits to which these interests are entitled, the board is compelling sales of corn and cotton, wheat and wool, cattle and swine, and in this way, according to its own statement, the board hopes to bring about a reduction in the price of food and clothes, forget-

ting that such a process, carried to its legitimate end, would leave the whole of us without supplies.

We do not like to think of groups in the American Congress; we like to believe that every man is there to legislate for the general welfare. But it begins to look as though economic necessity would compel the farm and livestock interests to organize for their own protection.

Financial Dreamers Who Do Not Realize That a New World Epoch Has Dawned.

Greenville, S. C., September 30.

Editor Manufacturers Record:

With reference to your article, "Has the Federal Reserve Board's Wrecking Policy Resulted in Increased Production?" in Bulletin of September 27, the paragraph concerning the activities of the Federal Reserve Board and the obsolete methods of that body, and your statement that the war did something more than cause world inflation: This is exactly the doctrine that the writer has been preaching for these many weeks. It is no more possible for the world to get back today to where it was in 1914 than it is to undo the deeds of wrong committed during the war years.

When the men of the South folded their tattered flags, stacked their muskets, parked their powder-blackened artillery and turned their faces southward, they went into a land that was physically changed, in the sense of railroads being torn up, bridges destroyed, cities burned, forests cut down, etc., but these were things that could be restored. The great change was from an economic standpoint. Men who went out in '61 left conditions behind them which never again could they know. An era in the world's history had dawned and the old order of things had passed away as completely as the clouds of last week passed over the skies. Manners of life were changed, values were changed, necessities were different and greater, lines of thought had changed, and every endeavor required a greater and different effort than ever before had been made.

We of today look back on that period somewhat as they looked back upon the Colonial period. We were living, prior to 1914, in an era which dawned with the close of the Civil War. The most of us had only heard and read of conditions before the war, and it was as a dim distant day to us because we had never known it. Of course, there were many amongst us (the older men) who were never able to adapt themselves to the changed conditions, and they are yet to be seen here and there and yonder, going about, living in the past because the reality of the days of the twentieth century were too great for them to master after the schooling of the days prior to 1860.

Immediately after the signing of the armistice the world became obsessed with the idea that prices of everything would drop, the bottom fall out, so to speak, when compared with what the bucket of supply had held during the war days, but after four months of this pipe dream its people awakened to the fact that it was clamoring for more than it had called for when shells were screaming. More, I say, it was calling for, although this demand was for different commodities.

Our dreamers who sit high in authority, however, are like those who yet live in the atmosphere of the 50's. They cannot see that an era has dawned affecting not only the States of one nation or the North American Continent, but every individual in the entire world, whether he live in the southernmost tip of Africa or the northernmost part of Asia, whether he be a shepherd on the plains or a farmer in the cotton fields of the South. It matters not whether he lives in tropical climes or in the land where the snows come, he is facing different conditions. Money has lost its old significance and we are confronted with the undeniable fact that never again will we be able to buy for the piece of silver we called a dollar what we bought with it in the past.

Our forests will grow again in time. We lost many young men on the battlefields of Europe—grass will grow over their graves and others will come to take their places in the ranks of industry. Cities may be replaced where they have been destroyed, but the manner of living that those who went out to the war left behind them will never again be known by man who is now alive. When the schoolboy of the future reads the pages of history he will find at the close of the period ending in 1914 a new chapter, just as there is a division between ancient and mediaeval history, just as there is a division between mediaeval and modern history.

He will read that the most terrific war since the dawn of history brought about over the earth a change in economic conditions just as radical and as far reaching in its effect as the practical usage of the little wooden blocks Caxton produced, with this difference: it took years after the discovery of printing for the world to fully realize what it meant, but this change came upon us as snow during the night. We went to our slumbers, as it were, viewing the world in one way and awoke with the morning to see it changed. There are those who dream yet that old condition will return, and they are like those occasionally found who believe that the worthless paper of the Confederacy will some day be redeemed.

All of the past is behind us and we cannot believe that the conditions existing prior to 1914 can be brought up to this date, but we must go forward with renewed effort and build again in accordance with the new plans, as did the ragged Confederate soldier who accepted what he met when he returned and laid his hand to the task of building up the South—the South which we have today and which the unchecked activities and dreamings of the Federal Reserve Board will destroy.

W. LINDSAY WILSON.

Governor Harding Has Power to Ruin a Million Farmers.

[From a News Article in the Nashville Tennessean.]

Power to drive a king from his throne and a sparse shock of straw and gray hair that hasn't been trimmed in five weeks.

Power to ruin a million farmers or bankrupt a million merchants, and a cheap broadcloth coat that puckers at the seams.

William P. G. Harding, Governor-General of the United States Federal Reserve Board, has greater power than any ruler of the earth. Nero could "off with their heads" to a hundred Christians with a wave of his hand. He ate his food from golden plates and his roast suckling pigs had diamonds in their eyes.

Harding can say three words and around the world and into the farthest country panic could follow. Thousands to Nero's hundreds might die. Harding has no diamond-crested suckling pigs and I think his scarf pin is agate.

As Governor-General of the super-bank of the world, Harding is, perhaps, the world's greatest individual power today. America is the world's banker. Her banks are financing the nations of the earth. Harding and his advisers control the fate of American banks, and hence the fate of every nation dependent upon them.

Ancient rulers waved a jeweled scepter and perhaps a massacre followed. Harding lifts his voice to say, "Raise the rediscount rates," and every man and woman and child on earth is affected.

For example, cotton is an essential of civilization. The United States is a heavy cotton producer. Cotton growers today have millions of bales unsold in their warehouses. They must sell the cotton or go broke. The cotton market is low. If they sell now, they must take a little profit and every cotton buyer will buy cotton cheaper. If they hold their cotton, every buyer must buy dearly.

They wish to hold. They go to their banks and they ask the bankers to loan them money on their cotton until the market rises and they sell. The banks haven't enough money. They can loan the money if the Federal Reserve Bank will buy the notes from them. If the Federal Reserve Bank refuses to buy, or "raises the rediscount rate," the bank can't loan, the cotton growers can't hold and cotton goes cheaper.

"The Federal Reserve Bank doesn't care whether prices rise or fall," Harding told me; "it simply cares to keep the reserve within the legal limit. However, if we loaned money to the cotton people we'd have to loan the wheat people and the oat people, and the barley people, and soon we'd have \$4,000,000,000 or \$5,000,000,000 loaned. So we won't help any agricultural industry hold its products for price raises. We help them move the crop to market, and that's all."

What does this uncrowned king of the world look like?

He looks like a banker and he is a banker. His spectacles are rimmed with light celluloid and are hooked to his ears. His face is lined deep about the mouth. He has a slight stoop, yet an easy, cautious sort of walk and carriage. I don't think he much cares whether he wears socks that match his tie, though I think mostly they do, because black appears his favorite tone.

The Reserve Board and Cotton.

[Asheville (N. C.) Citizen.]

Editor of The Citizen:

Please permit me, a cotton farmer from South Carolina, temporarily a resident of the North Carolina mountains, to set you straight on a statement in today's paper under the caption: "Directing the Forces of Deflation." You say, "In plain terms the cotton farmers were told that they would have to get along on the banking accommodation given to other interests." You are evidently in sympathy with that view. If that was what Mr. Harding and the Federal Reserve Board told the committee of the Cotton Association, it is not what a prominent member of the committee told me when I met him just back from Washington last week. I do not think Mr. Harding nor the Board could have said so, for the very good reason that the act under which they operate puts farmers and farm products, properly warehoused, and farm paper in a distinctively favored class. The farmers did not appeal for "special consideration in banking privileges." They merely appealed for the due consideration granted them in the Federal Reserve Act. I have a letter before me from the Deputy Governor of the Richmond Federal Reserve Bank in which he says, "We have been working to that end and preparing ourselves, and seeking to prepare the South Carolina banks for considerably more than six months, to do all that it can to help the South Carolina farmers to properly market the cotton crop." "Frankly," he says, "it is just a little discouraging, after we have been conducting the most vigorous campaign we know how to conduct, with the very end in view, to have a man in your position blandly ask us, at this time, what we are going to do."

This letter is dated September 1. Evidently somebody is badly fooled, either the farmers' committee or The Asheville Citizen and those who think with you that farmers deserve no "special consideration." Whatever the Federal Reserve Bank may have been doing, I was not the only one that did not know what to expect, for bankers and others were all in the same uncertainty. Nor did his letter convey any information of how the help would be extended, and he concluded with the statement that banks should insist that each farmer will, within a reasonable time, sell enough cotton to pay his debts." If the farmers do that, then I fail to see how the Federal Reserve Banks six months' campaign has helped at all. If they do that at present prices, 75 per cent of them will not pay their debts, many farmers will have to go out of business and more labor will be crowded into the cities to increase the unrest. You may not know it, Mr. Editor, on account of the prosperity of your city and section being so largely due to the tourist money spent in your midst, but the one essential industry today that stands between law and order, on one side, and anarchy on the other, is agriculture—just plain farming. And this industry deserves and should have special consideration, and it was so recognized by the Congress that passed the Federal Reserve Act. We have not been getting it; if we have, not to see, and that is why a committee of farmers and bankers from all over the South went to Washington last week.

Deflation of the country, 1865-1873, impoverished the South as much as the war of secession. We were just coming into our own through the friendly operation of the Federal Reserve Board from 1915 to 1920. Then the Board decided we had too much prosperity and proceeded to put on the brakes. Again history will repeat itself, and then men who converted their holdings into cash will levy tribute upon the great producing classes of the country. As a bank in New York wrote Governor Manning, then president of the Bank of Sumter in 1908: "The South is mining the business of the country by holding cotton. We have no money to let you have to hold cotton, but you can get all you need to make another crop." Always credit or money to make a crop, but no money nor credit to market a crop. This the Federal Reserve System was inaugurated to break up. If it operated like the old system, we are no better off than before. But, thank God! we have had some relief, and the cotton and tobacco growers of the South will not again become the slaves of the world. We will have "cost plus" for what we sell or the world can go hungry and cold.

There has been a great deal of talk lately about fifty-cent dollars. In this connection it is well to quote from a speech made by Senator Tillman in Memphis in the free-silver campaign of 20 years ago. He said: "They taunt us with wanting a fifty-cent

dollar—I hurl in their teeth that they want a two hundred-cent dollar." We want enough money to do the business of the country in an orderly manner. The business and population have increased enormously, yet somebody has persuaded the Federal Reserve Board that we must get back on a pre-war basis, and you and the credit men from whom you quote approve that that idea carried back to a single track from Washington to Atlanta. Do you know, Mr. Editor, that the double track is such a relief and is paying so well that Southern Railway officials are now planning four tracks on that main line?

Your position and the credit men's position and the Federal Reserve Board's position is like putting Asheville back into the village class where it was 30 years ago when I attended the first immigration convention in the South in Asheville. All that the Farmers' Alliance of the nineties and Wm. Jennings Bryan in ninety-six asked for was money enough to keep pace with the growing business of the country.

Through the increased gold production of the world and the mobilization of credits by the Federal Reserve System, we at last got the elastic currency that spelled prosperity. But we are so prosperous it scares somebody and we are told we must get back into the old clothes of 1914.

I think, Mr. Editor, that influential papers like yours that are not in the agricultural districts could do a world of good if you would study these questions from the standpoint of the farmers. I have written longer than I intended because I want the farmers' position better understood by you and your many readers, who do not seem to appreciate that the farmers carry the burdens and are the foundation stones of all real prosperity in this country.

Yours truly,

E. W. DABBS.

Tryon, September 27, 1920.

The South's Demand for a Protective Tariff.

[Baltimore Sun.]

Editor The Sun:

In your editorial this morning criticizing the position taken by Senator Harding in regard to the need of a protective tariff for agricultural as well as industrial interests, you have doubtless overlooked the fact that a demand for a protective tariff is rapidly spreading in the Democratic circles of the South. The farmers are, this time, leading in this fight rather than industrial interests.

The Atlanta Constitution, for instance, whose editor, Clark Howell, has been a member of the National Democratic Committee for some years, is demanding a protective tariff for the benefit of the peanut and soya bean growing interests of the South, and in a recent issue said:

"The situation in a nutshell, therefore, is the Chinese farm laborers and the South Sea farm laborers, at negligible expense, are producing low-cost crops for the Japanese firms to transport in Japanese vessels to America to beat down the prices which American producers should receive for their commodities.

"There should be a protective duty on these products, produced at low standards of living, and no one question confronting the next Congress is more important.

"In this matter Georgia is peculiarly interested."

The position taken by the Constitution was merely giving commendation to many resolutions passed by many conventions in the South recently called for the purpose of discussing the danger to the peanut and cottonseed and soya bean interests by reason of the tremendous importation of peanuts and peanut and other vegetable oils from the Orient with which the country is now being swamped.

The Virginia peanut growers took the lead in a convention demanding a protective tariff, and this was rapidly followed by conventions held in other parts of the South, and now Governor Parker of Louisiana has called for a Southern protective tariff convention, to be held in New Orleans in October, in order to awaken the country to the need of a protective tariff for all agricultural and industrial interests of the South.

In the peanut sections of Virginia the Democratic candidates, in order to have any hope of election, have come out openly and avowed their interest in a protective tariff, and stated that they would vote for protection on peanuts.

The magnitude of the peanut interest is not generally understood. The South has, of recent years, been raising nearly \$100,000,000 worth of peanuts a year. These nuts have largely gone into the manufacture of oil, being used for this purpose by the mills which were formerly devoted wholly to the cottonseed oil industry. Wherever the boll-weevil has invaded the South and made cotton unprofitable, the peanut industry has come in as the salvation of the farming interests, and the industry has been spreading with great rapidity. It is now threatened with complete destruction by reason of heavy importations of Oriental peanuts raised by labor which earns only 3 cents to 5 cents a day. The disastrous condition of the peanut industry in the South is illustrated in a statement furnished me this week by the United States Department of Agriculture. It is as follows:

"The nominal quotations on September 10 were from 6 to 9 cents the pound, but there was no demand. The department has peanuts of its own in storage at Florence, S. C., which it would like to sell, but cannot. The market is swamped with Oriental peanuts at the ports. Only this morning there was sent to us from the Department of Commerce samples of Oriental peanuts, which show conclusively that the Orientals have sent to this country and got our best seed. The industry is ruined unless there is a prohibition of imports or the imposition of a heavy tariff, and the 18 years of work done by this department will have been thrown away."

During the last fiscal year ended June 30 this country imported \$1,513,000,000 worth of foodstuffs, while our exports of foodstuffs amounted to \$2,141,000,000. The increase in the importations of foodstuffs for the fiscal year showed a gain of \$730,000,000, or about 90 per cent, while during the same period our exportations of foodstuffs decreased, as compared with 1919, by \$360,000,000.

In addition to these enormous importations of foodstuffs, we are importing heavily of other agricultural products. During the fiscal year we imported 690,000 bales of cotton, mainly from Egypt, where it is raised at low rates of wages, and a little from India and Peru. The aggregate value of our cotton importations, which cut heavily into the South's cotton-selling interests, was \$156,918,000, as compared with \$37,635,000 in the preceding fiscal year. We imported \$78,000,000 worth of tobacco leaf in competition with the tobacco raised in this country, and the tobacco growers of the South are beginning to demand a protective tariff with as much vigor as the peanut and the cottonseed industries. Of hides and skins we imported a total of \$376,892,000 worth during the past fiscal year, or a gain of \$227,000,000 over the preceding fiscal year.

These figures give some intimation of the enormous importations of agricultural products and the rapidity of the gain during the last 12 months. We are rapidly reaching a point where our importations of agricultural products, unless checked by a protective tariff, will largely exceed our exportations of all agricultural products. The result is inevitable, and that is the breaking down of American agriculture. We are beginning to import very heavily of corn from Argentina; Pacific Coast flour mills are running on Manchurian wheat. Asiatic peanuts and soya beans and vegetable oils are flooding our market to such an extent that American growers and producers of these products cannot find a market for them.

Under the circumstances, it is not surprising that the agricultural interests of the South are taking the lead for the entire country in demanding a protective tariff, and Senator Harding was only voicing the rising tide of a demand for protection, which has heretofore been one of the strongest free-trade papers of the South. It would be folly to shut our eyes to these facts. If the Democratic party fails to read the signs of the times, it will soon find out that the demand for a protective tariff on the part of Southern farmers is stronger than their allegiance to party ties.

Very truly yours,

RICHARD H. EDMONDS.

Personal Mention.

Mr. H. W. Hoyer, president of the Hoyer Lumber Co. of Wilmington, N. C., has arranged to spend three years in France on reconstruction work. He is a mechanic and civil engineer, and was engaged on ship-repair work in France during the war.

Protective Tariff to Be Demanded for Southern Products

SIGNIFICANT MOVE BY SOUTHERN LEADERS IN BUSINESS AND INDUSTRY—PERMANENT ORGANIZATION OF SOUTHERN TARIFF ASSOCIATION TO BE FORMED—OUTLOOK FOR LARGE ATTENDANCE AT NEW ORLEANS MEETING OCTOBER 11-12.

[Special Correspondence Manufacturers Record.]

New Orleans, La., October 4.

An organized movement to secure a protective tariff for Southern products has been inaugurated under auspices which promise far-reaching consequences. It is proposed to permanently establish a Southern Tariff Association, with a membership representative of all Southern industry. A meeting for permanent organization has been called for October 11 and 12 at New Orleans, and invitations to send delegates have been extended to all industries in the South. John H. Kirby of Houston, head of the Kirby Lumber Co., and a recognized leader in Southern development, is at the head of the movement. Joining in the call for the New Orleans meeting are Governor John M. Parker of Louisiana and A. D. Parker, president of the New Orleans Association of Commerce. G. W. Armstrong, a large plantation owner of Natchez, Miss., is chairman of the Organization Committee.

The call for the meeting is as follows:

A call for the Southern Tariff Congress to convene at New Orleans, La., October 11-12 is hereby issued and an invitation extended to all organized industries of the South to send 25 delegates each to the congress. The purpose of the congress shall be:

First—To provide a non-partisan forum for the discussion of public policies as they affect the progress and prosperity of Southern industry.

Second—To recommend to the Federal Tariff Commission and to Congress a tariff schedule on Southern products that will equalize the cost of production in this country with that of foreign countries consistent with the public welfare.

Third—To discuss enlarging the powers of the Federal Tariff Commission by giving it authority to adjust schedules to meet the changed conditions brought about by natural or artificial causes where such a course is clearly necessary to foster American industry and to conserve the public welfare.

Fourth—To discuss the problems of foreign trade development, and the bearing thereon of the fact that the United States is now a creditor instead of a debtor nation, and the need for American markets for those foreign products relied upon by foreign consumers of American products to pay their bills.

Fifth—To form a standing committee commissioner to speak for the productive industries of the South on national and international commercial policies of government.

Sixth—To permanently organize the Southern Protective Tariff Association.

Through Hon. John M. Parker, Governor of Louisiana, we are extending an invitation both to the Democratic and Republican candidates for President and Vice-President to address the congress, and also inviting members of the Federal Tariff Commission, all Southern Governors, United States Senators and Representatives to participate in the deliberations. Through the New Orleans Association of Commerce, we are inviting the United States Chamber of Commerce and all Southern commercial organizations, State and local, to send representatives to the congress.

Transportation and trade economists will be placed upon the program, as well as representatives of the several lines of Southern industry authorized by such industries to speak for them.

Joining to the call: (Signed),

JOHN M. PARKER, JOHN H. KIRBY,
Governor of Louisiana. President Southern Tariff Congress.
A. D. PARKER, GEO. W. ARMSTRONG,
President New Orleans Chairman Organization Committee.
Association of Commerce.

In commenting on the movement, Mr. Kirby, who is in New Orleans in advance of the meeting, said: "I think we should put the chambers of commerce forward as the leading agency in this work. The New Orleans Association of Commerce signed the

call, and they have invited all Southern chambers of commerce to send delegates. They represent the welfare of all the people, and a request for protection comes with more force from them than from any special interest desiring special favors. The departments of agriculture we are also trying to interest, and are making headway. With these two agencies we hope to pull the question out of petty politics and place on a high plane of discussion.

"In addition to invitations extended to all Southern chambers of commerce, all Southern Governors, Senators and Congressmen have been invited by Governor John M. Parker. I have extended invitations to all organized industries. Acceptances have so far been received from Hon. Wm. G. Culbertson, member United States Tariff Commission, Washington, D. C.; United States Senators A. B. Fall, New Mexico; Jos. E. Ransdell, Louisiana; Edwin Broussard, Louisiana, and Hoke Smith, Georgia; Governors Sydney J. Catts, Florida; Lee M. Russell, Mississippi; Edwin P. Morrow, Kentucky; Thos. E. Campbell, Arizona, and Hugh N. Dorsey, Georgia.

"Of organized industries, cotton mills (lint), rice millers, sheep and goat, cottonseed mills, iron, rice growers, cattle, sugar refiners, flour mills, citrus fruit, shipbuilding, cane growers, peanut growers, lumber and tobacco, all of which industries will have delegates present; United States Chamber of Commerce, and chambers of commerce of Texas, Memphis, Houston, St. Louis, New Orleans, Jackson, Charlotte, Waco, Birmingham, Wichita Falls, Brownsville, Montgomery and Phoenix, Ariz.; Atlanta Western Railway, L. H. Bell, industrial agent. Major W. A. Graham, North Carolina Commissioner of Agriculture, has appointed delegates and he will address the congress.

"Interest in the congress is, of course, growing daily, and we expect a much stronger convention than this report indicates.

"The delegates to the congress will faithfully reflect the political, industrial and commercial thought of the South through its most capable leaders.

"Governor John M. Parker will preside. The various lines of industry will select one of their number to present their industry to the congress and outline tariff policy they think the Government should pursue.

"We have found a strong sentiment throughout the South in favor of tariff revision and a definite desire to handle the subject through an organized medium. There is a strong demand for a protective tariff among some of the industries, and its origin is purely economical, and does not follow political lines. The industries seeking foreign trade are deeply concerned in our treaty relations with foreign countries, expanding our merchant marine and in organizing channels of trade with the leading European and Asiatic nations. The discussion will embrace all phases of the tariff, including protection, reciprocity, competitive and revenue provisions. The congress will outline a definite policy which it will recommend the Federal Government pursue toward Southern industry."

In a letter to the MANUFACTURERS RECORD Mr. Geo. W. Armstrong, an extensive plantation owner of Natchez, Miss., who is chairman of the Organization Committee, says:

"The subjects which will be considered by the New Orleans conference are: First, the cotton situation and the remedy for it; second, the Southern industries that need tariff protection; third, the formation of a permanent organization to represent the cause of Southern agriculture and industry before Congress and wherever its interest is involved. The most pressing and important matter is the cotton situation."

"Secretary Houston and Governor Harding, directors of the Federal Reserve Board, tell us to market our cotton; that the Federal Reserve system cannot furnish the credit to hold it; that

to do so will mean an undue inflation of the currency. These gentlemen are Southern men, and they know that the cotton crop will be gathered within 60 days; that this cotton must be held somewhere for a period of 12 months, during which time it will be spun and the product sold; that the market is a weak and limited one, due to the inability of many countries to buy; that the present market means a sacrifice at forced sale at about one-half the cost of production, which will mean bankruptcy to many men and disaster to the South.

"We cannot expect, and need not and should not ask, that we be treated differently or better than other sections of the country or other industries, and particularly those that the board may class as essential. The board has, after advising with the banking fraternity, deliberately undertaken to force down the values of all commodities with the purpose of bringing about normal prices and conditions, which, according to its view, seems to be approximately pre-war prices. In preparation for this work it obtained an amendment to the Federal Reserve Act near the close of the recent session of Congress enlarging its power, especially as to discount rates. In order to discourage the making of loans by banks it advances the rate of discount charged them as the amount of the money they borrow increases, and these advances in rates are made although the banks may be making loans to only essential industries. Be it said to the everlasting credit of some of them that they are paying for the money they borrow from the Federal Reserve banks as much as 10 and 12 per cent, and more than they are charging their customers.

"We do not know to what extent the President and his Cabinet may be committed to this financial policy, or what other business interest has been consulted regarding it except the banking fraternity. We should not be deceived or deceive ourselves about it. The Federal Reserve Board says that it cannot safely expand the currency further, and that values must be reduced to a point where commodities can be held, sold and exchanged with the existing volume of currency or less. We, of course, know that it takes three times as much money to pay cotton pickers at \$3 per hundred as it does \$1 per hundred, or to finance a crop at 30 cents per pound as it does at 10 cents. This increase in value and in the requirement for currency extends to every line of business, and the board, which has the sole power to issue currency, refuses to do so on the ground that it is unsafe and unwise. If so, we should submit with the same cheerfulness and spirit of co-operation that we have shown in complying with the many demands made on us by the National Government.

"We are entitled to be shown, for it means great sacrifice to all of us. It means a loss on every thing we have produced and that we now own except money, which is enhanced in value. It means that the national debt and Government expenses and taxes must be paid with \$1 wheat, 50-cent corn and 10-cent cotton and \$2 wages and dear money. It means the same disturbance and inequalities and distress and unrest in bringing prices down to a lower level that we have just gone through in their advance.

"The fact that currency has been increased about \$350,000,000 during the past few months, as pointed out by Secretary Houston, is not a sufficient or satisfactory answer. We are entitled to know why the currency cannot be increased to meet the legitimate needs of the country at present values, and whether it is really for the good of the country that industry be choked down and values reduced, and if not, whether the fault is with the law or the administration of it. We want to be shown why this country, the richest on earth, cannot finance the holding of its own cotton crop until it is needed by the trade, and if it cannot do so, then what country can. We want to be shown why it is necessary to maintain a 40 per cent gold reserve against currency which is based on short-time commercial paper given for goods in process of being marketed and signed by two solvent makers and endorsed by a member bank. We hope that some member of the National Federal Reserve Board will meet with us, so that this question may be considered from every angle. We should present our views to it and to the President and his Cabinet in an appropriate way, and, if necessary, to the Presidential nominees and to the country.

"The Tariff Act of 1921 to revise the Underwood Act of 1913 is now being prepared by the Tariff Commission under the direction of the House Ways and Means Committee. In the press

report from Washington giving out this information the following statement was made:

"It is certain that the great new element demanding high tariffs will be agricultural. The increasing imports of food products in proportion to decreasing exports is the reason. On the other hand, some large manufacturers formerly demanding protection now prefer free trade because it gives them better opportunity to engage in world commerce." This appears to be a statement of the Tariff Commission appointed by a Democratic President and a part of the Democratic Administration. It emphasizes the importance of organization on our part. A member of the Federal Tariff Commission has promised to meet with us.

"It is now the producer that needs protection, and not the manufacturer. The competition of oil from the soy and velvet bean of China and Japan has lowered the price of cottonseed from \$75 to \$25 per ton. The competition of rice from these countries has put the price of rice from \$12 to \$6, and has made the production of it unprofitable. The competition of wool and mutton from Australia and New Zealand has made wool unsalable and sheep-raising unprofitable. The competition of beef and hides from South America threatens the extinction of the cattle industry. Cattlemen, with few exceptions, have lost money every year during the past six years, many of them are broke, and all of them are very much discouraged. It is now within the power of the American packer, who controls the supply in both North and South America, to manipulate the market to suit his own purposes. There are others of our industries that will need protection under normal conditions.

"The success and development of these basic industries is essential to the prosperity of this country in peace, and to its strength and success in war. It will be a sad day for us when we become an importer of food and must rely on other countries for our supply. It will mean that the favorable trade balance, upon which our prosperity is largely founded, will disappear; it will mean still higher cost of living. It is folly to expect the farmer to continue farming and to continue producing at a loss. We must assure him a stable and a profitable market for his products, or pay dearly for our failure to do so."

Movement for Tariff on Peanuts to be Stimulated.

Suffolk, Va., October 1—[Special.]—More than 2500 peanut growers of Virginia and North Carolina have now signed the growers' contract drawn up last spring by Aaron Sapiro of San Francisco. Mr. Sapiro will again be in Virginia and North Carolina this week, and will address the growers at Waverly, Va., on October 6; at Woodland, N. C., on October 7, and at Suffolk, Va., on October 8. His coming will be made the occasion for lining up more growers to perfect the new exchange in order that it may control more than half of the peanuts grown in this section of the country. The 2500 growers now represent about 27 per cent of all the peanuts grown in the two States.

Mr. Sapiro will also discuss the tariff on peanuts and will give special impetus to the movement of the growers for securing a higher duty on peanuts. As the attorney for the bean growers' organizations of the West, he presented their appeal for a tariff on beans to the Ways and Means Committee of the House at the last session of Congress, and secured its favorable report on the bill. On account of the close similarity between the conditions under which beans and peanuts are grown in the East, the information he has gained in conducting the fight of the bean growers will be of special interest to the peanut growers.

To Build \$1,000,000 Branch Glass Works.

Sheet glass will be manufactured at Shreveport, La., by the United States Glass Co. of Morgantown, W. Va. It will be produced in a \$1,000,000 plant, which the corporation has decided to build as an addition to its series of glass factories located in the gas-producing districts. A 35-acre site has been purchased, and the plant buildings will include steel, brick and concrete structures covering about 1600x700 feet, the main building to be of heavy steel, 425 feet long by 300 feet wide. The glass will be manufactured by machinery, and the mechanical equipment will include three continuous tanks or melting furnaces, and about 500 operatives will be employed, about 300 to be skilled men who will come to Shreveport from other cities, where they are employed in glass factories of the company.

Graphite Industry of Alabama in Urgent Need of Protective Tariff

COUNTRY FLOODED WITH GRAPHITE FROM MADAGASCAR AND CEYLON, PRODUCED AT LOW COST BY LABOR OF WOMEN AND CHILDREN.

By WILLIAM W. LADD, Ashland, Ala.

Ceylon and Madagascar graphite has proved the downfall of the Alabama product. They are able to put their graphite in New York cheaper than the Alabama refiner can do so. The reason for this is that the Alabama man has to mill his ore, while the Ceylon man does not. He employs women and children at a few cents a day to sort the stuff. During the war, when the Ceylon stuff was not available, Alabama concerns flourished, but now the market is flooded by the cheaper Ceylon product. And what hurts is that Government experts have declared that the home stuff is equal, if not superior, to that produced in the foreign field. It is probable that with full development the Alabama concerns could supply the country. And now \$3,000,000 are waiting for the tariff to be placed on foreign graphite before they can make a return.

The Alabama graphite man asks only for a fair chance, and the country owes it to him.

The first effort made to mine graphite in the State of Alabama was some 20 years ago, when an Italian restaurant man from Birmingham came to the Ashland district and erected a five-stamp mill. Out of this man Gillardoni's little, impracticable stamp mill has grown the graphite industry of Alabama.

In course of time the Allen property was opened up near Gillardoni and became the largest producer of flake graphite in the State.

Later the Allen was merged with the Quenelda, which, eight days after work was completed on the mill, burned and had to be rebuilt. With the development of the Quenelda came experienced men from Pennsylvania and the construction of the Reading plant, now shut down and decaying, a monument to the pioneers in Alabama graphite work.

Next came the Alabama Graphite Co. It was financed by local men and operated by a Northern miner. For several years the Alabama and the Quenelda dominated the Alabama field.

Graphite is now mined extensively in Clay, Coosa and Chilton counties.

Chemically, graphite is pure carbon; however, the No. 1 flake usually runs about 92 per cent carbon, the balance being sand and other impurities.

Ever since the time of the Gillardoni stamp mill the process used in the saving of graphite has been a subject of study and change, and there is still much room for improvement. There are two general methods for the milling of graphite, the wet system and the dry. Others are variations of these two general methods. The dry system is fast falling into disuse in Alabama in favor of the wet system, which is in many ways more practicable. Graphite is mined in open cut with the aid of dynamite and other explosives.

On first entering the mill it is run through a first crusher, which crushes the larger lumps of ore. From this it is run into a secondary crusher, which is usually a revolving mill, loaded with steel balls or rods, which grind the ore into a fine sand.

From the secondary crusher, in the dry system, the sand is taken and dried, and then run out on cells filled with water, with the expectation that the graphite will float and impurities sink. However, a certain amount of sand and mica will float also when dry.

On the other hand, when the wet system is used, the sand from the secondary crusher is run immediately into cells, where it is mixed with water and a flotation oil, usually pine oil. These cells are filled with water and equipped with either water jets or air jets. These cause a heavy foam, formed of the graphite and flotation oils, the sand sinking and going out of the waste trough.

This foam is run over a concentrator, which further separates the sand from the graphite and makes a concentrate analyzing about 75 per cent carbon. The concentrate is dried and run through a grader, which grades it according to the size of the flake.

There are several grades, the sand going with the lower grades. The product is now ready to ship.

Everywhere throughout the graphite district development has kept pace with the market. As the manufacturers of crucibles began to recognize the Alabama product and new uses were found for it all the time, new mines were opened up and improvements made in the older plants, so that they could take care of more stuff. The industry began to get on its feet.

Then came the war. Prices for No. 1 flake jumped from 6 cents to 17, 18 and 20 cents. The demand doubled, and with the enhancing price men from every walk of life invested in Alabama graphite property. It is no exaggeration to say that \$2,000,000 were spent in Clay, Coosa and Chilton counties in two years. The graphite industry reached what might be termed the boom stage. Plants were built that cost their owners small fortunes. There are in view on one road alone leading from Ashland, in the distance of eight miles, 17 different plants. The business reached such an important stage that the Alabama Power Co. brought its hydro-electric power from the Coosa River and supplied almost every plant in the district.

Then came the end of the war and the fall of graphite prices. Cost of machinery advanced by leaps and bounds, and labor more than doubled. The market fell flat. Graphite dropped to 8 and 9 cents. Mills found that they could not make both ends meet under the existing conditions, and there was but one alternative. This they accepted; they shut down.

The use of graphite in industry is still in its infancy. Few people know any of the uses beyond that of making lead pencils. Some of the more common are the making of crucibles, the making of paint, lead pencils, lubricants, foundry facings and some of the poorer grades for stove and shoe polish, and the list is growing longer every day.

The story of Alabama graphite runs parallel with other young industries through the experimental stage, but it differs from them in this: that while others have been protected from foreign competition by tariffs, the Alabama graphite men have been left out to succumb to the invasion of the outside product. When there is a protective tariff levied against imported graphite and the Alabama man can once more make a fair return on his money, then will the graphite business wake up.

Mexican Laborers to Be Provided by Responsible Employment Bureau.

Laredo, Tex., September 24—[Special.]—Arturo de Saracho, Mexican consul-general at Laredo, is in charge of the Mexican labor employment bureau, which has just been opened here. This labor agency has for its purpose the supplying of Mexican workers for the farms and ranches of Texas. The proposition of establishing the bureau had its origin with the Rural Landowners' Association of South Texas. The matter was laid before President Huerta and received his official sanction. It is expected that, in addition to protecting ignorant Mexican laborers from various abuses at the hands of unprincipled employment agents on the border, the bureau will make the movement of laborers into the United States much freer than formerly. It is estimated that there are more than 100,000 cotton pickers needed in Texas at this time. Under the new arrangement for obtaining laborers from Mexico this demand for cotton pickers may be largely supplied from that source, it is believed.

The membership of the Rural Landowners' Association represents the ownership of many millions of acres of land. While its members will have the first call for the Mexican laborers, it is expected that there will be a sufficient number to supply the needs of farmers and ranchmen throughout the State.

European Conditions and American Opinion, 1918-20

By EDWIN C. ECKEL.

[**Edwin C. Eckel, recently Major of Engineers United States Army, one of the most widely-known engineers and geologists in this country, identified for many years with the United States Geological Survey and afterwards representing leading business interests in the investigation and development of iron ore and cement properties, was appointed Captain of Engineers on January 23, 1917, and detailed on the staff of the American Expeditionary Force in France. While in France Mr. Eckel was in close touch with the whole war situation. After returning to America he wrote a book entitled, "Coal, Iron and War: A Study in Industrialism, Past and Future," which has attracted very wide attention in Europe and in this country.**

Mr. Eckel recently returned to Europe for investigation of important matters for clients, and the Manufacturers Record has been able to arrange with him for a series of important articles on the economic and political conditions of Europe as seen from the standpoint of a trained expert who, by reason of peculiar opportunities, is enabled to get into the closest touch with the foremost business men and Government officials in the Allied countries.

Mr. Eckel will continue from time to time, as he has the opportunity, a series of articles on European conditions. We believe that no other American who has visited Europe will be better able to size up the whole situation from the economic and political standpoint.—Editor Manufacturers Record.]

During the past year or two political and economic conditions in Europe have been discussed at length in the American press, even to the point of boredom. And since much of this discussion has been by very competent journalists, it is clearly necessary to explain just why anything more in that line should be written, and to apologize in advance for my own share in the matter. In so doing I hope to throw most of the blame upon Mr. Edmonds. My present trip to Western Europe and Northern Africa was originally planned as a purely professional necessity, because I had to pass on various iron and coal mines that were being taken over by my clients. That involved visiting a number of important industrial centers, and the editor of the MANUFACTURERS RECORD suggested that the views of an engineer on industrial and social conditions might be different, even if not more sound, than those of bankers or politicians. So since our friendship is of very long standing, indeed, you have the whole story.

Before we can gain much in the way of understanding what European conditions of today seem to promise in the way of industrial and social reconstruction we must definitely recognize the fact that great changes have already occurred, both in Europe and in America, since the Armistice Day of 1918. In various European countries progress has been made along lines that might reasonably have been anticipated; in others the changes which have actually occurred have been in surprising directions. In America, on the other hand, there have been several sharp and definite changes in the general trend of public opinion—and the occurrence and reason for those shifts have not been generally understood either by our old Allies or by our old enemies. The final result is that today Europe and America are perhaps further from really understanding one another than at any time since the fateful July of 1914. Merely to serve as a background for the loosely connected sketches which may follow, it will pay us to try to get a summary idea of the broader changes which have occurred both in European conditions and in American opinion since November, 1918.

In France, for example, a definitely conservative Government has come to power and is supported by a practically unanimous public opinion. There is the end of anarchistic socialism and the beginning of a new spirit of conciliation between Church and State. The third republic has survived a desperate war, it has emerged victorious, and it will celebrate its fiftieth anniversary this year. Physical and economic rehabilitation have progressed along with social and political reconstruction; and France today is in sounder condition than any other European country. Further than this: France today is not militarist, but every Frenchman, regardless of class or condition, realizes that it must never again be possible that an unprovoked assault should bring about the conditions of 1914-1918. France does not desire war; but if it must needs be that wars must come, she has not the slightest intention of permitting the next war to either begin or end on French soil. Three German invasions in one century are really enough.

In Germany, on the other hand, the political and social developments of the past year have been, to me at least, in directions entirely unexpected. When I last saw the occupied territory, in the late spring of 1919, there was a definite spirit of separation in the air in Western and Southern Germany; and it seemed likely that Bavaria, Baden and the Rhine Provinces would cut loose from their old associations. In other parts of Germany,

notably in Westphalia and in Silesia, there were sovietist outbreaks and fears of anarchistic socialism. Today neither of these things has come to pass. Germany has developed a new nationalism as intense under its new republic as under its old empire. The Soviet spirit is dead and merely its reflection is allowed to appear, from time to time, in order to impress the Allies with the fear of Bolshevism. In truth, Germany now seems to be under the control of a small group of men so far from being Socialists that, by comparison, Chancellor Butten and Judge Gary could be looked on as daring radicals. And these temporary owners of the new Germany are not of the old army class, who with all their faults were usually gentlemen and never cowards. On the contrary, the new crowd are profiteers, safely embusqued during the war, and now come out into the open to fatten on the loot. And the possibility of the loot is, of course, due to the opportunities afforded to an enterprising speculator during a period of utterly mad paper-money inflation. Some of these details we will recur to later.

The British Empire has regained its shipping supremacy, but its internal social conditions are troubled and its foreign policy is a mystery to the innocent bystander. For myself I cannot see just what a new alliance with Japan is worth in comparison with Australian loyalty and American friendship, but perhaps the answer might be found in India. As regards the overtures for Bolshevik commercial relations, they are perhaps more comprehensible: we can put the problem easily into terms of petroleum supply, present or future.

With regard to Russia the situation has become clearer, if not brighter. The Soviets are in substantial control of all Russia. Their offensive power is weak, but their defense would be formidable. They must continually carry on communistic propaganda in order to survive, and they will ultimately collapse for purely economic reasons. Until they do collapse their natural allies are the new Germany and the old Japan; and so in any case the Bolshevik control of Russia is not a purely domestic problem, but is a matter of keen interest to all of our Western civilization.

As for the changes in American public opinion, they have been obvious enough to us, though perhaps not clearly understood abroad. On Armistice Day we were all glad the war was over, but we were all thoroughly in accord with our old Allies and willing to let them deal with the Germans as they deserved. Then came the affair of the Treaty and the League, which finally developed into a matter of party politics, in which neither side had an absolutely clear case, and so the public became thoroughly tired of the whole question. But at this stage we were still anti-German and pro-Ally. Later on, however, we were subjected to very definite pro-German propaganda, designed to separate us from the British and the French. Some of this was an honest result of the unfortunate Irish muddle, which no one but an Irishman could even pretend to understand. Some of it was due to the frank and intelligible efforts of the German banking-houses, and some of it to the utterly foolish speculation in German currency and German "securities." And then came what was perhaps the most influential single factor: a remarkably clever, interesting and successful book, containing delightful pen-portraits of three leading Allied politicians, along with a thoroughly partial and unsound attempt to prove that in punishing Germany the world was being wrecked by purely selfish interests. It did not

profess to be impartial. The author frankly says that he asked for a Peace Conference billet in order to help out the Germans. Coming from a clerk in our own Treasury or State Department, we could have placed its political, financial and social importance very exactly, but coming with a British hall-mark it was taken very seriously in America, France and in Germany. A German journalist has recently said that the "economic consequences of the peace" would prove to be the "Uncle Tom's Cabin" of the German race. As a Southerner by adoption I think that description covers the case exactly. If by 1980 the Germans have made as much progress as our negroes have since 1860, I would be glad to have my grandchildren employ them in the fields, or even about the houses, but I would not care to think that intermarriage or social equality would be possible. The Germans are going to pay for much of the damages they have done, but that is no reason why we should accept them as friends.

Perhaps I have written too savagely about an unimportant man

and a beaten race, but it is hard to be coldly impartial when you have been again in Northern France. Today I came back from Verdun through the tragic old Gare de l'Est, through which so many millions of French soldiers went to take their places in that hard-fought part of the lines, and to which so many hundreds of thousands of French wives and mothers went finally to get the news—and perhaps the bodies. The old sign is still there—the first one that you used to see when you came into Paris on permission: "Mourning costumes made to measure in eight hours." And then, after passing through the blood-stained, tear-stained halls, you can picture, for comparison, the snug little English clerk, securely embusqued in a Government office during four years of war, carefully laying aside his neat little pen and taking off his war-worn little cuff protectors and starting out on his hazardous voyage to France in order to help save the Germans from his own people. Why, even the Kaiser, deserting his troops on the eve of their last fight, seems almost a man in comparison.

The Political and Social Reconstruction of France

By EDWIN C. ECKEL.

It is worth while remembering at this critical period in the history of the world that on three different occasions in the past it has been France that has saved what we are pleased to call our Western civilization from being crushed out completely under the onrush of barbarian hordes. Fourteen centuries ago a Gallo-Roman army stopped the advance of Attila and his Huns, and though the barbarians were not completely crushed, the battle of Chalons marked for ever the high-water mark of Hunnish invasion. Four hundred years later Charles Martel, with a purely Frankish army, met and defeated the Saracens at Poictiers, near Tours, and for all time since that battle has marked the maximum of Mohammedan power. Barely over six years ago, what seemed to be an entirely unstemable wave of German invasion broke finally against the French line of defense on the Marne.

Today for the fourth time in history France is acting as guard of our civilization, because while her old Allies are indifferent or hostile, she alone is actively meeting the wave of Tartar anarchism that has swept down on us all from out of the Russian steppes. It is time that we all realize that we are all facing a very real danger; that for the sake of Europe it is better to fight it on the Vistula than on the Rhine, and that for our own sake alone it is better to meet it on the Rhine than on the Hudson or the Ohio. To put the matter in the most cold-blooded and selfish form imaginable, let us say this: We none of us like street fighting, but if it needs must come let it be rather in Warsaw or Petrograd than in Paris or New York. That is the real issue today, and the sooner we realize it the better it will be for the world. We have talked about a League of Nations until everyone is tired of the subject, and while we have talked the nations have crumbled under our eyes. What we need now is a League to defend civilization against barbarism come again; after that fight has been won it will be time to begin chattering once more about national boundaries and international peace.

The Reconstruction of France.

The fact that in the struggle now on hand it is France, not England or America, that plays the leading role is itself a matter that demands some consideration. For I can recall that, as late as the summer of 1919, returning from two years' service abroad, American sentiment seemed to be seriously doubtful as to social conditions in France. There was all kinds of wild talk as to the probabilities of Red outbreaks in France and of Socialist success at the French elections, while almost everyone overlooked the fact that basally and fundamentally the social and political structure of France was sound—far sounder than that of Italy or even of England. A country in which almost half of the total population are landowners is not likely to go Bolshevik, and if that fact had been clearly realized our bankers might not have backed the wrong horse as persistently as they have done. I have elsewhere* summarized my experiences with French peasants and laborers, working under war conditions, and I see no reason to change those opinions today after they have been subjected to the severe

practical tests of the past year. In fact, written today, the conclusion might be stated in even stronger terms.

The first sign given to the outside world was the absolutely overwhelming success of the conservative candidates at the French elections in the fall of 1919. The extreme radical groups were practically eliminated at the polls, and the final result was a Government more homogeneous, more nationally representative, and also more rationally conservative than has been in power since 1871. And the point that is particularly interesting is that, despite its conservative character, or perhaps it would be more exact to say because of it, the present French Government receives more popular support and is subjected to less serious criticism than any of its predecessors for many years.

This Government, coming into power to represent France itself and not some vague theory of human happiness, has gone about the work of reconstruction—physical, commercial and financial—in a very firm and definite way. What has been done in the way of physical rebuilding and reconstruction of the devastated region of Northern France can be put quite readily into figures, and I will recur to that phase of the subject in a later article. It has been a very surprising exhibit of the triumph of human energy over difficulties, and we can only understand it when we see that there is less idleness in France than in the United States or in England. Practically everyone is working in France today. They are playing a hard game, and it does not make French life very gay today, but it does make it very safe for the future.

Commercially, the balance of trade is still against France, due to the fact that certain very necessary supplies and raw materials must be imported in quantity, while certain important exports have been decreased or cut off. As regards the former, the wheat crop this year was lower than had been hoped and expected, so that it was necessary to buy a very respectable tonnage of foreign grain, even in the face of unfavorable exchange conditions. Cotton, coal, petroleum, tobacco and copper are also very important and very necessary imports, and this has served to depress exchange. All of these are now almost entirely of foreign origin, but it seems probable that in the future development of the vast French Colonial Empire it will be possible to develop a heavy colonial production of at least three, and possibly of four, of the staples that I have named. Coal will always remain as a necessary import.

Financially, the decline in the exchange value of the franc has served to cover up one very important favorable development. I will be able to present definite statistics later, but at present it can be said that since the beginning of 1920 France has shown the greatest reduction of outstanding paper-note circulation of any country in the world. Thanks to the fact that a thoroughly competent banker accepted the post of Minister of Finances, the effort in the direction of rehabilitating the French financial position have borne important fruit. Taxation has been imposed with an iron hand, and contrary to our popular impressions in the subject is far heavier than America and probably heavier than in Great Britain. It may, for a rough estimate, be assumed that this year every person in France—man, woman and child—will

* "The Rehabilitation of France." The Annalist, New York. September 15, 1919.

then you back from which so places in hundreds get the the—the same on hours." stained English our years taking off on his Germans troops prison.

pay an average of around \$100 in taxes. For comparison, that is perhaps three times as much per capita as is paid by America—a country which did not suffer any physical losses during the war.

The Question of Church and State.

Laying aside these various industrial and business questions for more detailed discussion later, we may pass on to brief consideration of social developments which may, in the long run, prove to be even more important factors in the progress of the country.

One of these is obviously the present tendency towards a rapprochement between Church and State. It is a tendency whose importance and extent it is very easy to overestimate, but it is impossible to deny its existence and its interests.

For several decades before the World War the relations between the French Republic and the Catholic Church had been strained at the best and bitterly hostile at the worst. The situation which had arisen was one which it is easy for anyone to criticise, but very hard indeed for anyone to offer a thoroughly practicable solution. Fundamentally, under normal conditions, most Frenchmen would probably be good Catholics; and very few indeed, regardless of their own personal disbelief, would have supported an effort to eliminate the Church entirely. But as time went on thorough believers in a republican form of government became convinced that it would be difficult, if not impossible, for the Church to entirely dissociate herself from support of royalist pretenders and from interference in purely political affairs.

From these conditions there came about a series of acts and of reprisals on the part of both the great powers involved. Some of the things which were done in this long struggle were obviously just and necessary; others seemed to be unfair or unnecessary; some even seemed to be trivial and ridiculous. But the net result was that a bitterness was infused into French political life that had no parallel in countries with happier internal relations. Now, one effect of the war has been to reduce this bitterness very perceptibly and to bring about very definite efforts on both sides to come to some reasonable agreement on the matter which still remains at issue.

It is still too early to form any definite conclusion as to the extent to which this reconciliation will be carried or as to the form that it will take. But the mere fact that it is possible to consider it at all, without passion, is evidence of the distance which sentiment has traveled since 1914. In literary power, of course, the Neo-Catholic school to which so many of the well-known younger writers belong is a factor of importance, and tends perhaps to make the observer overestimate the real strength of the movement.

The Tendency of French Socialism.

Finally, we come to the most important factor in the reconstruction of France, and that is the loss of power of the Socialist school, taken as a whole, and the changed ideals of its leaders.

Before the war the Socialist group, including all of its various subdivisions, was easily the most important factor, and it included in its ranks many of the cleverest and sanest men in France. With them, however, it also included extremists of very different type.

In the last year or two three factors have been at work which have brought about a remarkable change in the situation. First, the election of 1919 cut down the parliamentary power of the socialistic group very heavily. Second, the leading section of the party has deliberately taken as leaders men of relatively conservative type—men, that is, who believe in and hope for ultimate socialism, but who are not willing to wreck France in an attempt to establish a Soviet despotism tomorrow. Third, the attitude of the Russian Soviets, with their insolent demands on the Socialist groups of other countries, has operated to disgust many who have always considered themselves as thoroughly good Socialists. Today, for example, we have published the report of two sane French leaders of the Socialist party who went to Moscow to discuss with the Russian groups the future of Socialist action. They return with a report which has probably reached the American papers already. In summary the Russian Soviets will permit Socialists of other countries to join their precious Internationale only on terms which no white man could possibly accept. So there is an end, so far as French Socialists are concerned, to anything which savors of relations with Russia.

Today we may consider that the reconstruction of France is well on its way, that its foundations are solid, and that the social

structure of the country is sound. Which, after all, is not a matter for surprise. A leading French financial weekly really summarizes the situation very fairly when it says, speaking of social changes which are taking place elsewhere:

"The danger is not in France! it is elsewhere—in Italy and in England. That is why we must watch more carefully than ever the events in the two countries which are not only our Allies—at times shifting and not very reliable—but also our neighbors, our two near neighbors."

A Plan for Funding Allied Debts and Providing for Tax on Sales Instead of Excess Profits.

Virginia Association for the Common Good.

Richmond, Va., September 30.

Editor Manufacturers Record:

The following plan of our Central Advisory Committee for the funding of the Allied Loan bills receivable, now lying in the Treasury, and with reference to a tax on sales, in order to relieve the country of the burden of taxation it is now staggering under, has been adopted by this association; and its strength from every section of this State is being brought to bear upon the representatives in Congress, urging their influence, and finally their vote, in support of the plan referred to.

The plan is as follows:

To amend the excess profit tax laws in a way to provide ample revenue to care for the necessary expenditures and interest on our national debt and to relieve the people of the oppressive method now employed, producing sufficient revenue for our country's needs.

If our Government would ask that the countries representing the ten billion dollars bills receivable to give us bonds of long duration with a 5 per cent rate of interest and endorse these bonds as security for principal and interest, it would not be oppressive to the countries referred to, and the bonds could be exchanged for Liberty Bonds now outstanding or possibly sold in the open market. This would relieve our Government of the interest it now pays on ten billion dollars of its debt, aggregating a relief of \$500,000,000.

It is fair to assume that the foreign nations intend to pay their debt, and if so, they should be willing to fund this debt into long-time bonds with definite maturities and definite interest-payment dates. It is reasonable to hope that through this plan and by economy in the administration of the Government its requirements can be reduced by a sum exceeding one billion per year.

If our Government would amend its present excess tax laws so as to charge 1 per cent on the sales of every producer of raw material, the manufacturer, the jobber and on the sales made by the retailer, sufficient revenue would be derived by this method to pay the Government's expenditures and the interest on our debt. Taxable revenue from this and other sources would provide means to gradually liquidate our country's obligations.

The trade of our country in 1918, domestic, has been estimated at sixty-eight billion dollars; foreign, nine billions, making a total of seventy-seven billions. These figures represent the value of merchandise produced and sold at home and abroad and imported for sale. The progress of this trade from the producer to the consumer through various stages of agencies will be handled on an average of four times before reaching the final purchaser. This gives approximately three hundred billions of dollars upon which to calculate our tax rate. On the foregoing plan of taxation it appears that a tax rate of 1 per cent will be sufficient to provide the necessary financial needs of our Government. Under the present method much of the excess profit tax is added to the manufacturer's sales, the jobber's sales and to the retailer's sales. This has affected the high cost of living, and the present method has had a deterring effect upon the expansion of industry.

This method would make the collection of taxes very simple, eliminating much of the expense necessary to collect revenues under the present plan, as all the agencies liable for the tax could render quarterly, semi-annually, or annually, statements of their aggregate sales as may be required, enclosing check to the Government for 1 per cent thereon.

The foregoing would certainly eliminate the many objections to the present method, not be a burden upon any trade agencies and would not be felt by the consumer.

W. T. DABNEY, Secretary.

Industries and Natural Resources of Czechoslovakia

By RICHARD E. KADICH, Editor of "The Czechoslovak Trade Journal," Prague.

With ample natural resources at her disposal, Czechoslovakia has developed her industries to a high degree. This is no new feature of the republic, which was founded only in October, 1918, but dates back to the times when Bohemia, Moravia, Silesia and Slovakia formed integral parts of the Austro-Hungarian Monarchy. In fact, Bohemia and Moravia were considered the richest provinces of the Danubian Empire.

Although Czechoslovakia is chiefly an industrial country, her agriculture is sufficiently important to allow for the feeding of the population out of the home supply, with something to spare for export. The import of foodstuffs at the present time is a transitory feature of the post-war effects. The question of fuel has been satisfactorily solved by the settlement of the Teschen dispute, which placed Czechoslovakia not only in a position to cope with the home demand, but also to use coal and lignite as a compensation medium for such articles of which she is short, as, for instance, naphtha.

The country now disposes annually of 14,000,000 tons of coal and 23,000,000 tons of lignite, exclusive of 2,000,000 tons of coal and 4,000,000 tons of lignite which must be furnished to Poland and Austria. Besides, the output can be considerably heightened by modern improvements in the production. The cause of the present scarcity of coal for industrial purposes lies in the shortage of rolling stock, but this is being remedied with all possible speed. There is a wealth of timber and wood which cannot all be used up in local industries, so that a large surplus is exported. The future supply is assured by national forestry. Iron forms another valuable asset, and in this respect the country has again profited by the recent frontier delimitation of Carpatho-Russia, gaining the important iron-works at Trinec, on the Bohumin-Kosice railroad, with an annual output of 2,000,000 q of pig-iron, over 2,000,000 q of refined iron and 1,700,000 tons of coke.

The frontier ratifications of Carpatho-Russia have provided Czechoslovakia with salt mines which, with proper development, will supply the home demand and make her independent of Poland. The soil contains every known metal, including silver and gold in small quantities, iron ore, lead, tin and uranium containing radium. Granite, several varieties of marble, calcium and cement exist in large quantities, allowing of extensive export. The cultivation, partly for industrial purposes, of barley, hops, beets, etc., can still be considerably intensified. Many rivers—the future generators of electrical energy—and water-ways, to be joined by canals, are passing through the country. The two most important rivers are the Danube and the Elbe, providing outlets into the Black Sea and North Sea, at Hamburg, respectively.

At the partition of the Austro-Hungarian Monarchy it was found that a large percentage, 80 to 95 per cent, of the industrial establishments were situated within the Czechoslovak Republic.

The sugar industry is, without doubt, a very valuable national asset. During the transition period sugar formed the medium of compensation, by which Czechoslovakia was able to obtain the most needed raw-materials from abroad. The culture of beets is scientifically carried on and extended all over the country.

This year 7000 tons of refined sugar were sold to the United States, and negotiations for a further supply are pending. The price was \$440 per ton, f. o. b., Hamburg. Owing to the shipment of the first consignment via this port, rumors got abroad that the sugar was of German origin.

It might not be amiss to take this opportunity for stating that no German-made goods of any kind whatever are exported through Czechoslovakian sources. The two countries are bound to trade with one another, but all goods exported from Czechoslovakia are of native origin. Austria has, in the last two years, purchased quantities of manufactured articles here and re-exported them as her own products, but measures for stopping this trade have been taken.

The textile industry is of great importance, comprising cotton mills of some 4,000,000 spindles, and wool factories of over 1,000,000 spindles. In normal times the output exceeds the home demand by about two-thirds which is exported. In the important cloth-producing districts, as Brno, Humpolec, Reichenberg, etc., all kinds of woolen fabrics are manufactured: fine and medium

fabrics for suits and costumes, worsted and carded yarn, mohair and cashmere, cloth for ulsters and overcoats, loden, coarse cloths (halina, hunga, etc.), shawls, plaids, cloth for technical use, various kinds of felt, etc. Hosiery, underwear, neckties and hats are also manufactured on a large scale. The quality of the goods and their price have gained for the Czechoslovak textile industry a high repute. At present, however, there is a shortage of raw-material and coal, owing to transport difficulties, which reduces most factories to about 40 per cent pressure.

GLASS.—Bohemian glass is among the best known in the world. Chemical glass, bottles and jars, pressed glass, cut glass, polished glass, window glass, fancy goods from Gablonz, as glass bangles, beads, artificial stones, crystal glass jewelry and glass buttons are manufactured on a scale which provides for the export of 80 to 99 per cent of the production.

The number of factories in the various lines is as follows: Ordinary hollow glass, 66; cast glass, 19; machine cast glass, 11; cut glass, 52; glass for lighting purposes, globes, etc., 24; bars and tubes for Gablonz ware, 11; crude glass for the Haida industry, 19; special glass and colored compositions, 17; glass for watches, 3; chemical glass, 3; window glass, 24; smooth, ribbed and fluted glass, 6; cast mirror glass, 4; blown mirror glass, 3; photographic glass, 2; bottles of all kinds, 17. Besides, there are 3600 establishments for cutting, engraving, etching, painting and mounting. All in all, about 150,000 workmen are employed.

Hollow and pressed glass is made in 58 mills of larger dimensions, which, working on a 60 per cent scale, produce monthly 20,000 tons; 80 per cent of this is exported. Bottle glass: seven works, monthly output of water, mineral water, wine and beer bottles, 7,000,000. At full pressure this can be brought up to 20,000,000 bottles per month. Window glass, plate and ordinary: 24 mills working on a 75 per cent scale, monthly output, 1,200,000 m² of window glass and 3000 tons smooth and ribbed for building purposes. Eighty-five per cent of the production is exported. Of the mirror glass, 80 per cent is sold abroad, 50 per cent finished as looking-glasses and mirrors, and 50 per cent half manufactured. Fancy, luxury glass: 95 per cent of the production is exported. Gablonz ware is now being made on a 50 per cent scale and most of it finds its way abroad.

MACHINERY.—Agricultural and electrical machinery is being manufactured on a fairly comprehensive scale, with the exception of machines driven by motors. The manufacturing program includes steam and combustion locomotives for driving threshing machines, electro-motors, wind and water motors, draught machines and agricultural implements, such as all kinds of plows, cultivators, harrows, rollers, weeder, etc. Of these there is a mass production resulting in a brisk export trade. There is a shortage in reapers, mowers, turning and reaping machines, and the deficiency is chiefly supplied by the United States. Standardization of type in the output of the various factories is much needed. The manufacture of electrical machinery suffered, at first, from a lack of copper, aluminum, textiles, insulators, rubber, silk, cotton and electro varnish, but large imports of these raw materials have enabled our industry to execute back orders and to accept new ones. The import of electrical machinery has been restricted to the lowest possible level.

DYNAMOS, MOTORS, TRANSFORMATORS.	Import weight in kg.	Import value in kc.	Export weight in kg.	Export value in kc.	Proportion between import and export prices.
1919.					
June	244,007	1,654,704	515	13,515	1 : 121
July	114,561	1,596,923	31,643	360,481	1 : 40
August	150,877	1,425,193	86,976	703,526	1 : 2
September	220,908	2,297,692	21,701	393,644	1 : 6.7
October	183,080	1,749,747	48,178	628,389	1 : 2.7
November	285,197	2,610,534	17,618	204,891	1 : 12.8
December	175,789	1,539,180	38,061	502,280	1 : 3.2
1920.					
January	189,521	2,165,496	25,891	345,229	1 : 6.2
February	208,935	2,191,300	97,742	862,000	1 : 2.5
March	192,500	3,083,500	43,812	1,094,250	1 : 2.8

In January, 1920, electro-technical machinery was exported to Poland, 50 per cent; Austria, 15 per cent; Yugoslavia, 10 per cent; Germany, 9 per cent, and Roumania, 9 per cent. In March the sales to the Argentine amounted to 40 per cent of the whole

export: to Austria, 22 per cent; Holland, 15 per cent; Switzerland, 10 per cent; Poland, 7 per cent, and Yugoslavia, 2 per cent.

BOOTS AND SHOES.—There is a large number of factories employing over 100,000 hands, which, granted a sufficient supply of leather and tanning materials, are able to turn out quantities of boots and shoes for export after satisfying the home demand. However, it is not a high-grade article, and prices would have to be considerably lowered if the export trade were to reach its former extent. Most of the machinery used in the factories is from the United States.

Paper and paper goods form another large industry which can both satisfy the home consumption and leave a big margin for export. This is an important factor at the present time when the world's paper supply, especially that of news-print, is so very restricted. The output of the local mills could be quadrupled if sufficient pyrites were at hand. These are now being imported from Spain, whence the high transport charges add to the cost of production.

China and porcelain are manufactured on a large scale, chiefly in the district around Carlsbad. The quality is good, and great quantities are being exported.

Other manufactures worth mentioning are those of pottery, musical instruments, dolls, games, pencils, alcohol, starch and liquors, garnet jewelry, wicker work and baskets, mother-of-pearl and other buttons, linen, lace and embroideries, hair nets, etc.

Industrial art has also reached a high standard, there being a number of schools and colleges, where painters, sculptors and designers apply themselves to the artistic side of industry.

Imports into Czechoslovakia.

Czechoslovakia is, and always will be, in need of raw materials for her industrial requirements. The textile branch must have cotton, wool, raw silk, jute, hemp, flax and their waste. Hides and skins, and to a certain extent, also leather are wanted from abroad.

The metallurgic industry is a ready buyer of ore, wolfram, ferro-manganese, ferro-silicium, iron, copper, zinc, tin, aluminum and nickel.

Naphtha and its products, motor spirit, lubricating oil, etc., are steadily wanted.

Vegetable oils, grease, turpentine and rosin are always strongly in demand.

To close the list without a claim to completeness, there is a ready for market: Groundnuts, cocoanuts, oil seeds, fish oils, seed oils, essential oils, palm oil, copra and wax; chemicals: tar products and by-products, potassium, calcium chloride, mineral salts, mineral phosphates, muriate, arsenic acid, borax, shellac, camphor, iodine, derivatives of coal-tar, such as aniline dyes, explosives, synthetic drugs, including antiseptics, anaesthetics, aspirin, antipyrin, pharamidon, salyslic acid, salol, etc.

The demand for all colonial produce, e. g., tea, coffee, rice, cocoa-beans, spices, lemons, rubber, feathers, shells, mother-of-pearl, etc., has, of course, also to be met by importation.

Until agriculture satisfies the home demand, by intensive cultivation, a large portion of the foodstuffs must come from abroad, such as meat, fat, fish, wheat and condensed milk.

Finally, there is a good market for tobacco leaves, India-rubber, tanner's bark, tanning materials and extracts, dye-wood extracts, cherry wood, horse hair, bristles, cotton yarn (finer numbers), spinning machines, dentists' materials, surgical instruments and typewriters.

Exports from Czechoslovakia.

Coal and coke restricted owing to diminished output; cotton goods of every sort; woolen goods; leather goods, gloves, trunks, bags, fancy goods, boots and shoes; paper and paper goods, cigarette paper; glass in every variety; china and porcelain; china clay in large quantities; earthen ware; machinery, particularly agricultural implements and machines, plants for breweries, mills and distilleries, motor cars, tools, hardware, cutlery, rolling stock and railway engines; wood: planks, furniture and home-made toys, musical instruments, dolls, games and pencils; sugar; beet sugar and its products, molasses, syrup, honey, confectionery, sweets and jam; hops and malt; beer, alcohol, starch and liquors; garnet jewelry; wicker work and baskets; hosiery, underwear, neckties, hats, mother-of-pearl and other buttons; embroideries and hand-made lace; hair-nets; soap, candles, wax, sulphuric acid,

hydrochloric acid, sulphate of soda, ammonia, brooms and brushes, rabbit skins, ham and bacon, etc.

In many of these articles the present supply for export is small, owing to insufficient output, but everything is being done in order to increase the production.

Trading Regulations.

Exports and imports are being controlled by the Ministry for Foreign Trade. From time to time general lists of goods are issued for which export or import licenses are granted. For these application must be made on special forms. All goods passing the frontier either way must be accompanied by a permit in order to satisfy the custom officers that the regulations have been complied with. The import and export of some goods are prohibited, and for others the applications for licenses are treated individually.

Foreign traders are strongly advised to apply for the permits through their agents or contractors in Czechoslovakia.

Raw Materials Do Not Pay Any Duty.

As the import and export policy in particular lines depends upon the supply and demand, and is, therefore, subject to changes, it is advisable to obtain the desired information on the spot.

In conclusion, it may be stated without fear of contradiction that the natural and industrial resources of Czechoslovakia are so rich as to entitle the country, with proper development, to a place similar in prosperity to Holland or Belgium.

Wheat Exports from Galveston for September Outrank Cotton.

Galveston, Tex., October 1—[Special]—Wheat exportations through the port of Galveston during the month of September totaled 7,618,000 bushels, according to the figures of the grain inspection department of the Galveston Cotton Exchange and Board of Trade. In addition to the 27 vessels that loaded export wheat here and left for ports overseas, carrying a total of 5,961,218 bushels, other steamships took on cargoes aggregating 1,656,782 bushels preparatory to sailing. The largest cargo during the month was one of 335,550 bushels loaded by the British steamer Linpe, which departed for Hull. Exports to ports of the United Kingdom, as has been the case for several months past, led all others, and Italy looms large as holder of second place. This fact is possibly due to the Italian Government using Galveston as the export point for the moving of large wheat contracts placed in the country. There was a marked increase during September in the number of Italian boats engaged in the wheat traffic, and these, with American and British ships, markedly increased the grain shipments to Italy last month over those of August. Barcelona, Hamburg, Havre, Nantes and Dublin all claim their share of the exports. Liverpool, with 923,000 bushels, led all other receiving ports.

September has always been considered as a month during which the movement of cotton occupied the center of the stage of activities, but a peculiar combination of circumstances seems to have placed wheat in the leading role this season. The fact that the movement of cotton has been retarded by the excess of low-grade staple on the market and the high export rates, coupled with the fact that the countries of Europe are anxious to secure all the wheat possible and are turning to the importation of the grain rather than the staple, seems to be accountable for the change of the position of the two commodities on the export list this year.

\$500,000 Masonic Temple Building at Tulsa.

A \$500,000 temple will be erected at Tulsa, Okla., by the Tulsa Masonic Building Association. It will be of structural steel construction, have ornamental terra-cotta exterior, with tile roof, and concrete, wood block and hardwood floors, safes, vaults, etc. The architects are R. G. Schmid & Co. of Chicago.

Beckley Pocahontas Coal Co. Chartered.

Capitalized at \$1,000,000, the Beckley Pocahontas Coal Co. has been chartered and will be organized for the purpose of developing coal lands in Raleigh county, West Virginia. The incorporators include A. J. King, Harry S. Irons and E. C. Wilson, all of Huntington.

Texas Bill to Prevent Cotton-Gin Ownership by Cotton-Seed Oil Interests.

Austin, Tex., October 1—[Special.]—Divorce of cottonseed oil mills and cotton gins in Texas is the purpose of a bill that has been introduced in the Legislature upon recommendation of Governor W. P. Hobby. It is asserted that the present low price of cottonseed in this State is due to the ownership of cotton gins by cottonseed oil mill men and packers. W. A. Keeling, acting Attorney-General, who has been investigating the situation, said:

"The ownership and control of the cotton gins of the State of Texas by the oil mills and packing-houses produces an intolerable condition in this State, and certainly this condition will not be tolerated by the people of Texas. The present condition, however, will continue just as long as the oil mills and packers are permitted to own, control and dominate the gins of Texas, and to use the gins as purchasing agencies in buying cottonseed."

To demonstrate the correctness of the position, he submitted the following figures, representing the average price being paid for cottonseed in 1919 and 1920 in all cotton-growing States:

States.	September, 1919.	September, 1920.
North Carolina	\$66.70	\$63.00
South Carolina	62.10	45.60
Georgia	69.40	43.60
Tennessee	63.60	40.80
Alabama	68.00	47.00
Mississippi	61.10	49.20
Louisiana	63.00	55.40
Oklahoma	60.00	51.00
Arkansas	66.80	54.00
Texas	66.80	26.10

He pointed out that at this time "Texas is paying more than twice as much to gin its cotton, and selling its seed for one-half the price of the other cotton-growing States." An instance was cited by him to illustrate "the evil growing out of the ownership and control of cotton-gins by oil mills." "At one town, at this time," he said, "the oil mill situated there owns or controls quite a number of gins situated in adjacent territory.

"One of the gins not controlled by the oil mill became involved in a fight for cotton to gin, whereupon the oil mill, through its gins, either owned or controlled, cut the price of ginning cotton to 10 cents per hundred pounds seed cotton and \$1.50 for bagging and ties, making a total of about \$3.10 per bale. As soon as the oil mill, through its gins throughout the country, succeeds in putting this individual out of business, there is no doubt that the price of ginning will be placed back at a figure which will make it worth while for the oil mill to retire the daring individual who should attempt to put his own price upon ginning."

Chemical Engineers to Hold Convention in New Orleans.

Plans are being worked out for holding the next convention of the American Institute of Chemical Engineers in New Orleans, beginning December 6. Two full days will be spent in New Orleans, and following this will be trips to the salt and sulphur mines nearby and also to points of interest in the sugar and lumber sections.

The president of the institute is Dr. David Wesson, who is widely known for his research and development work in the cottonseed oil industry.

The institute numbers among its membership many of the leading chemical engineers of the country who have been intimately associated with the creation and expansion of American chemical industries.

The institute held one of its meetings in Savannah, Ga., last year and the fact that they are coming again into the South for a meeting is indicative of the importance which they must attach to Southern resources available for chemical activities.

Georgia-Florida Cane Growers Organize.

The Georgia-Florida Cane Growers' Association has been organized at Cairo, Ga., by several hundred cane growers in various counties of the two States. The officers are as follows: President, W. B. Roddenberry; vice-president, W. J. Singletary; secretary, Thomas Wight; treasurer, K. P. Wight.

This Cairo organization is an evidence of the increasing interest that is being taken in the cultivation of sugar in Georgia and Florida. The association will work for the advancement of the sugar industry in these two States.

Southern Industrial Activities During September.

General industrial and building progress throughout the South continues to be active. Nearly every character of enterprise connected with manufacturing from Southern raw materials is being announced for establishment, and many existing enterprises are determining plans for increasing facilities. There are also being reported many thousands of buildings not directly connected with industrial pursuits. During September the MANUFACTURERS RECORD presented 3089 industrial and building items, containing the essential details of many plants to be established or enlarged, besides buildings for other than industrial purposes. There were 1761 industrial development items, 1328 building reports, 35 items of railroad construction, 340 of financial organizations, 576 items of prices and information wanted on many different classes of products, including 14 from foreign countries.

Coal mines, oil mills, drainage systems, electric plants, flour mills, foundries, hydro-electric developments, lumber mills, railway shops, road and street construction, textile mills, water-works, etc., were among the industrial developments. Apartment-houses, bank and general office structures, churches, city and county buildings, courthouses, hotels, railway stations, schools, theaters, warehouses, etc., were among the many buildings.

The September items (not including buildings costing less than \$10,000 and numerous industrial enterprises of a minor character, but which in the aggregate represent a large investment) are summarized in the following table:

	Total for Sent.	Total from Jan. to Sept., inclusive.
<i>Industrial Developments.</i>		
Airplane Plants, Stations, etc.	5	29
Bridges, Culverts, Viaducts	58	431
Canning and Packing Plants	26	186
Clayworking Plants	17	229
Coal Mines and Coke Ovens	163	801
Concrete and Cement Plants	9	65
Cotton Compresses and Gins	44	302
Cottonseed Oil Mills	16	56
Drainage Systems	14	137
Electric Plants	50	664
Fertilizer Factories	22	151
Flour, Feed and Meal Mills	21	305
Foundry and Machine Plants	60	611
Gas and Oil Enterprises	71	238
Hydro-electric Plants	9	84
Ice and Cold-storage Plants	54	475
Iron and Steel Plants	1	28
Irrigation Systems	3	16
Land Developments	33	220
Lumber Manufacturing	63	750
Metal-working Plants	14	156
Mining	21	231
Miscellaneous Construction	2	230
Miscellaneous Enterprises	118	1,077
Miscellaneous Factories	199	1,953
Motor Cars, Garages, Tires, etc.	150	1,656
Railway Shops, Terminals, Roundhouses, etc.	19	66
Road and Street Construction	287	2,454
Sewer Construction	39	481
Shipbuilding Plants	8	47
Telephone Systems	18	124
Textile Mills	13	555
Water-works	51	637
Woodworking Plants	66	591
Total	1,761	16,066
<i>Buildings.</i>		
Apartment-houses	49	434
Association and Fraternal	67	422
Bank and Office	49	793
Churches	147	1,155
City and County	37	277
Courthouses	9	92
Dwellings	363	2,815
Government and State	17	167
Hospital, Sanitariums, etc.	57	417
Hotels	42	442
Miscellaneous	45	390
Railway Stations, Sheds, etc.	26	92
Schools	198	2,120
Stores	125	1,286
Theaters	29	329
Warehouses	68	642
Total	1,328	11,873
<i>Railroad Construction.</i>		
Railways	31	272
Street Railways	4	20
Total	35	292
<i>Financial.</i>		
Corporations	67	1,133
New Securities	273	3,425
Total	340	4,558
<i>Machinery Wanted.</i>		
Machinery, Proposals and Supplies Wanted	576	5,771
<i>Fire Damage.</i>		
Fire Damage, etc.	134	1,120
Grand total	4,174	39,680
Foreign	14	37

High Value of Sudan Grass as Forage Crop.

Lubbock, Tex., October 2—[Special.]—In what is known as the pure-seed territory of the Lubbock region approximately 10,000 acres of Sudan grass were grown this year. It gives two cuttings each season. The first crop is threshed, and occasionally the seed of the second cutting is threshed, but for the most part it is used wholly for forage. The average yield of the two cuttings is three tons of forage. It is asserted that as a stock feed Sudan grass is nearly equal to alfalfa. It is specially suited for dairy, cattle and hogs, and as a result of the extensive production of the forage around Lubbock the dairying and hog-raising interests here have showed wonderful development during the last few years.

It is significant that although Sudan grass is now grown in nearly all parts of Texas, and has been during the last year or two successfully introduced into the Central States, the only locality where a specialty is made of raising it for seed is around Lubbock. The established reputation which the Lubbock seed has for purity causes it to be in great demand, and there promises to be an increase of the acreage each year. It is grown without irrigation and has proved itself to be especially adapted to droughty seasons. During the first two years that it was grown in this section the seed sold for \$1 to \$1.50 a pound. A large warehouse was built and operated here for the storage of the seed, pending its sale and distribution. When it is considered that

the average yield of seed is 1000 to 1500 pounds to the acre, the profitableness of the industry during the first two or three years following its introduction may be realized.

In every respect have the good qualities of Sudan grass as a forage crop, which were predicted when it was first introduced, been proved, according to farmers who have been growing it for several years. No unusual methods are necessary in planting and harvesting. It is an open prairie country and many of the fields are a mile long. The farms are especially adapted for the successful use of tractors.

So successful has been the production of pure Sudan grass given in the South Plains region of Texas that attention is being given to the growing of other crops for seed purposes essentially. Already big quantities of cane seed are grown here and shipped all over the country for planting purposes. The same is true of the different varieties of maize, Kafir corn and feterita. Experiments are to be made with beans, peas and products of garden variety.

To Extract Potash from Georgia Slate.

Referring to plans for a potash industry in Georgia, a dispatch from Atlanta is as follows:

Development of the potash deposits in Bartow county may begin actively soon, in the opinion of S. W. McCallie, State geologist.

The American Metals Co. of New York has been working for



SUDAN GRASS HARVEST FIELD IN SOUTH PLAINS REGION OF WEST TEXAS.



THICK, TALL GROWTH OF SUDAN GRASS NEAR LUBBOCK, TEX.

three years in the neighborhood of Cartersville on the problem of extraction of the potash content from slate for use in fertilizers. Some of the slate has from 8 to 10 per cent potash content, and experiments have reached the stage where the company is ready to make final tests to determine the commercial possibilities of the development. The chief engineer of the company was in Atlanta to obtain a car to ship a carload of the mineral to New Jersey, where it will be tested at the company's plant there.

In case the tests are satisfactory the company plans to erect a large plant near Cartersville and to carry on the work extensively on the large leases it has in that section.

South Atlantic Ports to Have Exhibit at Chicago Marine Show.

Charleston, S. C., October 4—[Special.]—Ports on the South Atlantic coast, namely, Wilmington, Charleston, Savannah, Brunswick and Jacksonville, are again to emphasize their strategic supremacy as ocean gateways to the Middle West, this time through the medium of a joint exhibit at the National Marine Exposition, which will be held in the Coliseum, Chicago, from October 18 to 23.

Country-wide attention was focused upon these ports last May, when, for two weeks, 140 leading business executives from the South Atlantic States toured the Midwest. In 16 major cities of that part of the country they engaged in conferences with the local manufacturers and shippers with regard to export shipping demands. This tour was made under the designation of the "Midwest-South Atlantic trip," and, while its primary object was to foster greater business for the ports represented by the delegation, the policy of utilizing any and all ports of the United States to the most advantage was strongly encouraged.

So manifest was the sincerity of interest taken by those in the Central States with regard to what was told them of the advantages to foreign commerce offered through greater use of South Atlantic ports that the port interests have undertaken to exhibit at Chicago carefully-prepared maps, charts, photographs and other material that will help shippers to better visualize the ports' advantages. Sections 11 and 12 at the Coliseum have been secured by the South Atlantic Ports Association, under whose auspices the exhibit will be conducted. Albert J. Stowe, secretary of the Charleston Chamber of Commerce, will represent jointly the interests of Brunswick, Charleston, Jacksonville, Savannah and Wilmington and have charge of the exhibit.

Efficiency the Standard, Not Membership in Union.

[Tulsa Daily World.]

"If the plumbing contractors of Tulsa want open shop men, we can furnish them with all the competent workers they can use inside of two weeks," F. A. Hurst, manager of the Employment Department of the Open Shop Association, declared Friday night. "Some of the contractors have already gone open shop, and they will of course be supplied with men first."

"However, we want to be sure the contractors will stick to the open shop, as it would not be practical for us to bring men here, perhaps from a distance, unless their positions are to be permanent."

"The talk that our men are not skilled is unfounded. Two plumbers we brought here recently, for a shop that has been 'open' for some time, made a grade of 99-9-10 per cent in a difficult examination. The others are all skilled men in their trade. We turned young fellows out of our school of instruction that could 'rough in' a five-room house as well as any experienced plumber."

"The Open Shop Association is ready at all times to cooperate with employers in furnishing them with skilled help. We never ask our men if they are union or non-union. All we want to know is, can they do the work. If they can, they are kept; if they cannot, we don't want them."

Two of the larger plumbing shops affected by the plumbers' strike for \$12 a day have already gone over to open shop, Mr. Hurst said.

Master plumbers have not budged from their refusal to pay the increase, and plumbers maintain the same attitude toward returning to work until the increase is granted.

Construction on Open-Shop Basis Shown to be Efficient and Less Costly Than on Closed-Shop Contract—Interesting Analysis of Wage-Scale in Eighty Representative Cities.

Dallas, Texas, September 28.

Editor Manufacturers Record:

The advocates of the closed shop have spent much time and energy spreading maliciously false statements as to the real purposes of the open shop movement, the favorite arguments being that the open shop was organized for the purpose of "destroying the unions" and denouncing it as a scheme of the employers to "reduce wages below the actual cost of living."

The first argument is completely refuted by the fact that open shop employers are equally ready to employ mechanics with or without cards. As to the wage-cutting argument I am attaching an analysis of wage scales of building mechanics in some 80 cities in the United States and Canada, with the union scale as a basis, which reveals some interesting facts and specifically repudiates the second argument.

Nor does this high wage scale necessarily mean an excessive building cost, for we classify our men, recognizing the fact that all mechanics are not of equal productive ability. We have demonstrated beyond question that construction on an open shop basis is efficient and less costly than when conducted as a closed shop contract.

SOUTHWESTERN OPEN SHOP ASSOCIATION.

Franklin O. Thomson, Manager.

Following is the wage scale analysis:

BRICKLAYERS—Dallas, Wichita Falls, Shreveport and Fort Worth pay \$1.50 per hour, the highest wage paid in the country. Of these all but Fort Worth are open shop cities. Oklahoma City, another open shop city, pays the next highest, or \$1.37½ per hour. Philadelphia and Wilmington pay \$1.30. While 35 cities pay \$1.25 per hour, 17 cities pay \$1.12½ and 10 cities pay \$1 or less. THERE IS NOT AN OPEN SHOP CITY, SO LISTED, PAYING LESS THAN \$1.25 per hour.

CARPENTERS—Chicago, Cleveland and Gary pay \$1.25 per hour. Butte, Denver, New York, Omaha, Philadelphia, Salt Lake and Shreveport pay \$1.12½ per hour. Of these cities Butte, Denver, Omaha and Shreveport are open shop cities. San Francisco, a tightly closed city, pays \$1.06½ per hour. Youngstown pays \$1.15 per hour. While 39 cities pay \$1 per hour and 22 cities pay less than \$1 per hour. THERE IS NOT AN OPEN SHOP CITY IN THE LATTER CLASS.

CEMENT FINISHERS—Butte, Chicago, Gary, Newark, Rochester, South Bend, Springfield and St. Paul pay \$1.25 per hour. Of these cities Butte and St. Paul are open shop cities. Albany, Cleveland, Denver, Erie, Oklahoma City, Omaha, New York, Pittsburgh, Salt Lake and San Francisco pay \$1.12½ per hour. Of these cities Denver, Oklahoma City and Omaha are open shop cities, while 21 cities pay \$1 per hour and 26 cities pay less than \$1 per hour.

ELECTRICIANS—Wichita Falls, an open shop city, pays \$1.50, the highest scale in the country. Beaumont, Chicago, El Paso, Detroit, Galveston, Gary, Kansas City, Tulsa and Shreveport pay \$1.25 per hour. Of these cities Beaumont, El Paso and Detroit, Galveston, Tulsa and Shreveport are open shop cities. Denver, New York, Omaha, Philadelphia, Pittsburgh, San Francisco, Salt Lake and Seattle pay \$1.12½ per hour. Of these cities Denver, Omaha and Seattle are open shop cities. Cleveland pays \$1.37½ per hour, while 33 cities pay \$1 and 21 cities pay less than \$1 per hour.

STRUCTURAL IRON WORKERS—Chicago, Cleveland, Fort Wayne, Gary, Indianapolis, Philadelphia, Pittsburgh, Rochester, Shreveport, St. Louis, Wheeling, Winnipeg and Youngstown pay \$1.25 per hour. Of these cities Indianapolis and Shreveport are open shop cities. Denver, an open shop city, pays \$1.15 per hour. Dallas, El Paso, New York and Portland pay \$1.12½ per hour. Of these cities Dallas and El Paso are open shop cities, while 40 cities pay \$1 and less per hour.

LATHERS—Wichita Falls, an open shop city, pays \$1.50 per hour, the highest paid in the country. Akron, Chicago, Cleveland, Detroit, Des Moines, Gary, Joliet, Omaha, Philadelphia, Rock Island, Shreveport, Sioux City, Tulsa, Vancouver and Youngstown pay \$1.25 per hour. Of these cities Akron, Detroit, Tulsa, Omaha and Shreveport are open shop cities, while nine cities pay \$1.12½ per hour and 46 cities pay \$1 or less.

PAINTERS—Dallas and Tulsa, both open shop cities, pay the highest scale recorded, \$1.50 per hour, while 33 cities pay from \$1 to \$1.25 per hour and 35 cities pay less than \$1 per hour.

PLASTERERS—Dallas, Oklahoma City, Shreveport, Tulsa and Wichita Falls, all open shop cities, pay the highest scale recorded, \$1.50 per hour, while 54 cities pay from \$1.12½ to \$1.25 per hour and 15 cities pay \$1 or less.

PLUMBERS AND STEAM FITTERS—Sherman, Shreveport and Wichita Falls, all open shop cities, pay the highest scale recorded, \$1.50 per hour. El Paso, an open shop city, pays \$1.37½ per hour. Dallas, Beaumont, Little Rock, Oklahoma City, Chicago, Tulsa, Des Moines, Gary, Joliet, Memphis, Omaha, Providence, San Francisco, Sioux City, St. Louis and Youngstown pay \$1.25 per hour. Of these cities Dallas, Beaumont, Little Rock, Oklahoma City, Tulsa, Omaha and Sioux City are open shop cities.

Land Reclamation in Lower Mississippi Delta

PRESENT STATUS OF DEVELOPMENT OPERATIONS—METHODS OF PROCEDURE—PIT-FALLS TO BE AVOIDED.

By ARTHUR M. SHAW, Consulting Engineer, New Orleans.

Owing to the fact that Louisiana contains one of the few large tracts of unimproved, fertile lands remaining in this country, considerable interest has always existed in the methods adopted and the success achieved in the reclamation and utilization of the marsh lands of the lower coast. This appears to be sufficiently general to justify a resume of present conditions. The writer was impressed on his return to this section after a "vacation" of two years in the army with the general improvement in the situation which has gradually emerged from the experimental stage. It has now been demonstrated that the reclamation of the Gulf coast marsh lands may be undertaken with a fair degree of certainty as to the results.

For the benefit of those who may not be familiar with the history of past efforts to utilize the lands in question, it should be explained that while some of the earliest agricultural developments of the country were in the Lower Mississippi Delta, all of these activities were confined to narrow strips of comparatively high ground bordering the river and the various bayous. These ridges were accumulations of silt deposited by the streams themselves, and while they were subject to overflow at times of extreme high water, they were above ordinary flood stage and were of such unusual fertility as to make their cultivation attractive, even though it was precarious.

The first efforts to drain the lower lands, which lie at about mean sea level, were made by the owners of river-front plantations, who built rear protection levees to keep out the high water resulting from heavy storms, and put in crude pumping equipment for the removal of rainwater falling on the enclosed area. Work of this nature is still going on, and the cultivated area is increasing through such efforts each year. While the problems are somewhat different than those encountered in the reclamation of the larger areas of typical meadow lands, this gradual extension of the older plantations has developed much data of value to those engaged in the larger reclamation projects.

Nearly all of the drainage projects of the lower Delta country are organized under the State laws as drainage districts. They vary from a few hundred to several thousand acres in extent, and as business ventures they vary from dismal failures to thrifty communities, where contented farmers, with modern machinery,

blooded stock and healthy bank accounts may be found. Practically all of this latter class of reclamation has been accomplished within the past 12 or 15 years.

Construction Methods.

For the reclamation of the typical "prairie" lands of this section, the general practice has become quite well standardized. The tract selected for reclamation is enclosed in a protection levee, built to a height of one foot or more above the highest known water, the barrow pit canal, from which material for the levee is taken, being on the outside of the levee system. A grid-iron system of interior canals is constructed, starting out with an extra wide and deep canal at the pumping plant site and reducing to the narrowest width that can be dug by a floating dredge at the outer extremities of the system. These canals are usually spaced one-half mile apart. Orange-peel dredges are most frequently used for the construction of levees and interior canals, though many dipper dredges are in use and are preferred in places where stumps or submerged timber may be encountered. Hydraulic dredges have been used to a considerable extent in the construction of interior canals, and are especially favored on account of their ability to discharge the excavated material over a wide strip, avoiding objectionable waste banks.

Considerable variation is found in the spacing of field ditches, 200 feet probably being an average. The most of these ditches are cut by machines of the wheel type. As first out, the ditches are about three feet deep, three feet wide at the top and one foot at the bottom. Very little tiling has been done, but on lands having a good depth of porous soil their use would be advantageous. At least one farm in this section has been completely tiled, and the owner reports satisfactory results. Drain tile do not give satisfaction if laid in the impervious sharkey clay forming the subsoil of the most of the Delta country.

Pumping Plants.

Up to about 1912 the most of the drainage pumping plants were operated by steam. The pumps in use included the old-style paddle-wheel, the vertical-shaft pump, with square wooden casing, and the more modern horizontal shaft, centrifugal pump.

The steam plants are rapidly giving way to the internal-combus-



PLANT FOR DRAINING A 7000-ACRE TRACT. DISCHARGE BASIN SHOWN CONNECTS WITH TIDEWATER.

tion engine, while the old paddle-wheel has practically disappeared, having been supplanted by the centrifugal and the still more modern screw pump. Conditions are especially favorable to internal-combustion engines (as compared with steam engines) in drainage work, on account of the necessity of frequent short runs at full capacity with an intervening time of idleness. The fuel loss of a steam plant operating under such conditions is a serious item. The earlier plants driven by internal-combustion engines were operated on gasoline or kerosene, but there is now a considerable number of such units using crude oil as fuel. The present tendency is toward a more efficient and permanent type of equipment than was at first considered good practice. Some of the newer plants are models in their orderly arrangement and general appearance, with cement floors, efficient arrangement of pipes, complete electric-lighting plant, etc., all housed in a permanent steel building of attractive design.

The usual custom is to provide a pumping plant of sufficient capacity to remove from one to one-and-three-quarters inches of water per 24 hours, the present tendency being toward plants of the larger capacity, which is equivalent to 33 gallons per minute per acre served.

General Considerations.

In order that a true knowledge of conditions may be secured, the causes of failures as well as of successes should be considered. While there are few projects which have been completely abandoned, there is a sufficient number that have failed to reach the success aimed at that a study of the underlying causes is illuminating. The following may be enumerated as being among the more common avoidable obstacles:

(a) Unsuitable location, causing heavy expense to settlers and discontent on account of lack of proper transportation facilities, markets and normal social life.

(b) Faulty plans, resulting in poor drainage and protection or expensive alterations.

(c) Inefficient management. This includes careless maintenance and operation of the facilities, location of unsuitable settlers, inducing settlers to move on to lands before they are in proper condition and other evils too numerous to mention. These defects have been frequent in the past, but are rapidly being overcome or avoided.

(d) Deliberate fraud. Fortunately, this section has been practically free from fraud in land ventures, the cases having been so rare as to have no real effect on land development.

(e) Excessive overhead. A few projects were loaded at the start with high-salaried, ornamental officials, and the result has been as might be expected. Every reclamation project, whether in the Delta country or elsewhere, should carry a permanent sign: "No drones need apply."

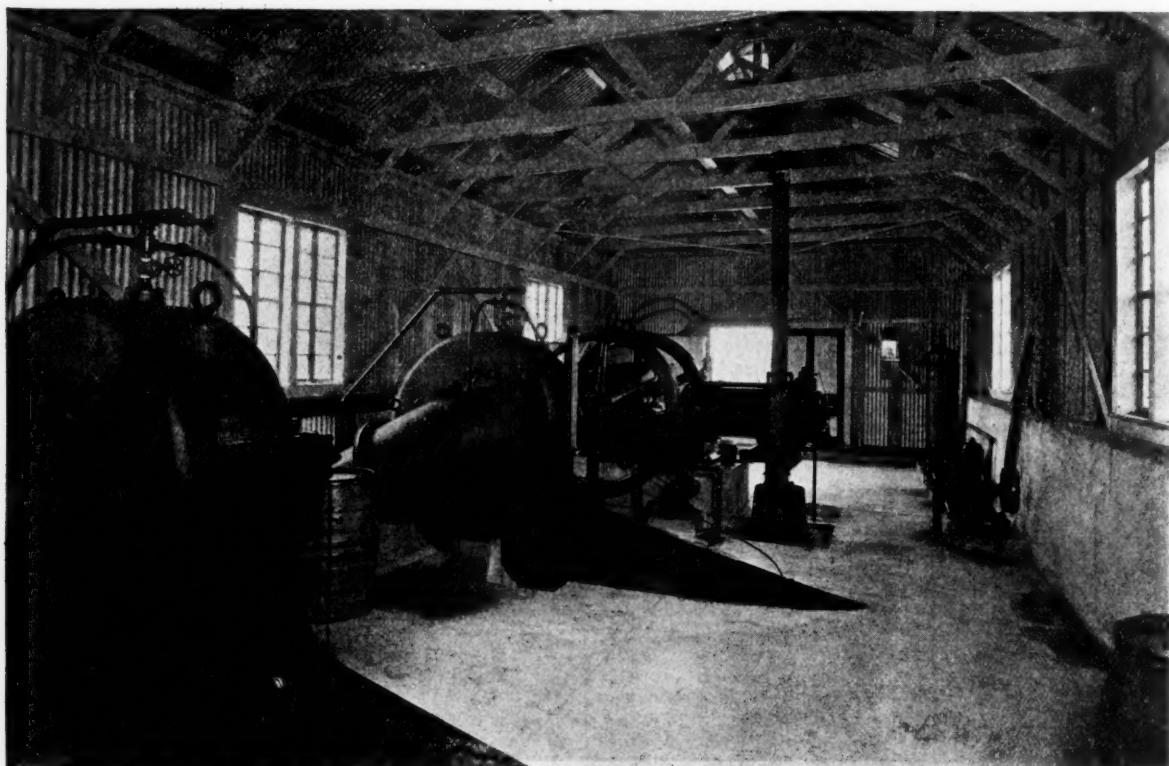
(f) Difficult soil conditions. While successful farming is being done on lands having excessive depth of muck and on lands underlain by old swamp timber, such conditions make farming difficult and more expensive than on tracts which are free from these objections.

(g) Too much timber land included in the reclaimed area. The cost of clearing heavy cypress stumps, added to reclamation costs, easily may put the difference on the wrong side of the ledger.

(h) Inclusion of too great an area in an initial project (or failure to colonize promptly). Many projects have fallen short of complete success from this cause. It may be accepted as axiomatic that no agricultural reclamation project in the Lower Delta can be a success unless the bulk of the lands protected and drained can be put on a revenue-producing basis within the first very few years after the protection and drainage have become effective. The reason of this is obvious. Under artificial drainage it is possible (at an expense of from 60 cents to \$1.50 per acre per annum for pumping) to insure almost ideal conditions of soil as regards moisture. This cost, applying to highly-productive lands, is negligible when considered in connection with the advantage derived, but if the pumping operations must be carried on for the drainage of 10 acres of waste land for every acre of improved land, the load becomes too great and the few lone farmers refuse to carry the excessive burden.

A composite of methods of procedure which have been recommended to various clients may be stated as follows:

(a) Before any construction expenses are incurred, adopt a plan of development which is the result of the best information and advice that can be secured. This plan should include a schedule from which may be estimated the funds that will be required and when they will be required. This plan and schedule to be strictly adhered to unless changes are made for well-considered



CENTRIFUGAL DRAINAGE PUMPS DRIVEN BY INTERNAL COMBUSTION ENGINES OPERATING ON CRUDE OIL.

ered reasons. Erratic changes in plans, made after the work starts, are expensive.

(b) General overhead expenses to be kept down to the lowest point consistent with proper direction and supervision. Pay what may be necessary to secure the best management available, but dispense with all ornamental officials, "sons of friends," etc.

(c) Make proper provision for financing the work as it progresses. Failure to meet bills when due results in loss of credit, higher prices and frequently in expensive delays to construction.

(d) Carry constructions through to completion as rapidly as is consistent with proper and economical work, keeping in mind that interest charges begin with the first outlay and nothing to



TYPE OF DISCHARGE AND SUCTION PIPES USED ON MODERN DRAINAGE PLANTS.

offset these charges may be expected until the work is completed. In other words, don't spend any money for construction until you have the right plan, and then spend it as fast as you can without waste.

(e) Adopt a good but not too elaborate cost-keeping system, and see that this is maintained and intelligently interpreted throughout the whole job. A good plan would be to carry the original estimates and time schedule as charts, parallel to the actual cost records expressed in the same manner.

(f) The project should be under one-man control; this man to have personal interest in the success of the undertaking. He should be a man of experience in handling men and materials, and should have (or employ) a good knowledge of engineering, machinery, miscellaneous construction, agriculture and accounting.

The prominent deterring factors to the rapid development of the wet prairie lands of Louisiana are:

Pioneer conditions met in the development of any new section. These conditions are rapidly improving.

Mosquitoes. These, like the poor, we have always with us, but troubles experienced from them have been greatly exaggerated and drainage is having its effect on their number.

Failure of many of the earlier projects. These failures can be explained by reference to the foregoing; the causes are well known and the methods employed by such projects should be avoided in the future.

Lack of transportation facilities. This is a serious drawback to some of the projects, but good-road systems are being extended, and it is now possible to drive by automobile to practically every reclamation project which has been operating for any length of time. Heavy hauling is done by water at a fraction of the cost of wagon haul.

High cost of construction work. As compared with pre-war conditions, prices have more than doubled, but, on the other hand, the value of farm produce has advanced and more economical and successful methods of cultivation have been introduced. Now that markets are becoming more stable, an increase in land development may be expected. A few new projects are now being launched which are starting off on a conservative basis and give every assurance of success.

Reclamation projects in the Lower Delta county which are well located, which have been properly designed and constructed and which have been wisely administered are now an attractive investment. Projects lacking any of these essentials should be given more than a casual investigation before investment in them is made.

Plan to Curtail Tobacco Production Next Year—Some Manufactures in Which North Carolina Cities Lead the World.

Raleigh, N. C., Oct. 4—[Special.]—North Carolina had one of its greatest crazes this year—the planting of tobacco—due to the tremendous prices, which were unprecedented during the season which ended in early spring. Now, with lower prices, there is a powerful movement to cut the crop at least one-third, perhaps even half, and to watch the world's demand. The prices last season seemed like a fairy story come true and they fired the minds of all too many growers who planted a record crop. Now there is a great tobacco-growers association, with as many members as the cotton association has. Warehouses are being hurriedly provided, but the space will fall far short of requirements.

The current remark is that if the farmers do not take warning from this year's lesson and plant food crops they will never learn anything. Incidentally activity in the automobile trade matched the tobacco growers, with 120,000 machines now in the State, including trucks, at an outlay of \$150,000,000.

North Carolina's Federal taxes, almost entirely on tobacco, last year were \$170,000,000. The State jumped up to fourth place in the sum received from the sale of farm products, with the great total of \$683,000,000. Here again tobacco played a tremendous part.

Last year the total revenue of North Carolina for State purposes was \$7,653,468, not counting the cash balance of \$1,372,104 at the beginning of the year. The year closed with a cash balance of \$1,381,575. North Carolina was one of the 33 States which ended the year not in debt. Only one State had a smaller per capita property tax in 1919, but now North Carolina is absolutely at the foot of the column for next year; there will be no State tax, and if the people ratify in November, at the general election, the tax amendment to the constitution, assessing all property at its absolute value there will never again be any State tax on land, building, household goods, crops, merchandise or solvent credits. The per capita cost of the State government was \$2.54 for 1919, only one State, South Carolina, being lower, \$2.40. At one time some opposition developed to the tax amendment to the constitution, but now it appears it will be ratified by a handsome majority.

It is pleasant to know that North Carolina is very prominent in the business world by reason of its leadership in certain lines of manufacture. Thus Winston-Salem, with the largest population in the State, is the leading manufacturing point of tobacco and also of men's underwear in the world. The internal revenue collections on tobacco at Winston-Salem for the year ended last July were \$80,344,345, nearly double those for the previous 12 months. That city is a port of entry and the customs receipts were for the year ended last July \$3,797,415.

Durham has the world's largest hosiery mill; Greensboro the largest denim mill; Wilson leads in the sales of bright leaf tobacco; Gaston county heads everything in the number of its cotton mills; High Point is second in furniture manufacturing, while Badin is near the top in the manufacture of aluminum. Kannapolis, the mill town built by the Cannon family, leads the world in the manufacture of towels. The writer observed Kannapolis the other day and found large additions to mill plants in progress. It is a young town, but its growth is astonishing. It is located on the Southern Railway, between Charlotte and Salisbury.

\$630,000,000 Savings in Five Southern States.

According to a report compiled by the War Loan Organization of the Fifth Federal Reserve District the total savings in the banks of five States on June 30, 1920, were as follows: Maryland, \$292,000,000; increase as compared with the corresponding date of 1919, \$25,000,000; North Carolina, \$73,000,000; increase, \$21,000,000; South Carolina, \$87,000,000; increase, \$26,000,000; Virginia, \$131,000,000; increase, \$17,000,000; West Virginia, \$47,000,000; increase, \$8,000,000. Total savings for the five States, \$630,000,000; increase, \$97,000,000.

Manufacturing Sugar from Corn a New Industry at Baltimore.

After conducting experiments on a very extensive scale over a period of three years at the plant of the Baltimore Pearl Hominy Co., Dr. A. W. Smith, chemist for the company, has discovered processes by which a new type of sugar, chemically known as invertose, is being produced from corn. The announcement has just been made by S. F. Evans, manager of the company, which is a subsidiary of the General Food Products Co., 501 Fifth avenue, New York city.

While it is not intended that this new sugar be used for household purposes, it is readily available for such use as a crystal white syrup or as a crystallized form. However, the company is placing the product on the market for use in manufacturing ice cream, soft drinks and soda-water syrups, and also for use of the restaurant trade.

At the present time 25 barrels of the product are being produced daily at the Baltimore plant, and additional machinery which will be installed within the next 30 days will increase the production to 100 barrels a day. About 35 men are now employed in the various processes, and about 100 additional men will be given employment when the ultimate capacity of 300 barrels a day is reached. This will necessitate the erection of new buildings, and plans for these improvements are now being made.

Invertose is not a by-product; it is made directly from whole corn, and is considered an exact duplicate, chemically, of honey, being composed of two sugars, levulose and dextrose, in about equal proportions. These are the same sugars occurring in certain fruits and also in sugar which is commercially known as invert sugar. Six hours is all the time required to complete the entire process of producing sugar from corn by this new process. Its discoverers claim that the working force is one-third that required for an ordinary corn-syrup plant, and the investment is less than one-fifth in property value. In the corn-syrup process it is said that two long processes over a period of about four days are necessary, because it is first necessary to produce starch and then the finished product.

Its discoverers claim for it many advantages over such substitutes that have been used for many years, namely, glucose, dextrose and maltose, being free from any undesirable tastes such as found in maltose and traces of undesirable chemicals such as found in glucose. Corn syrup, made by the action of acids on refined starch, contains about 45 per cent of ordinary sugar (dextrose), which is but slightly sweet, and 55 per cent of dextrin, which has no sweetness. It contains about 20 per cent water. Corn syrup is not over 25 per cent as sweet as cane sugar.

Corn sugar is merely corn syrup with water expelled, and has a higher dextrose or corn-sugar value, containing about 70 per cent dextrose and 27 per cent dextrin. Corn sugar is something less than 40 per cent as sweet as cane sugar.

Invertose, its producers say, is practically all sugar, containing 55 per cent dextrose and 25 per cent levulose, and about 20 per cent water. In its solid or dry form the analysis would be dextrose 65 per cent, levulose 33 per cent and water 2 per cent. On this dry basis it is about 80 per cent as sweet as cane sugar, and in the other form is about 65 per cent as sweet as cane sugar. The levulose contained in the new product has never been obtained from starch, and there has never been a syrup of this character made from corn. Experiments have been conducted almost everywhere during the past 25 years in an endeavor to produce this new sugar.

There are about six plants in the country producing other substitutes, but only one of these plants is east of Chicago. With sugar selling at 14 cents a pound in carload lots and invertose at 7½ cents a pound, its producers foresee a ready market for use in the manufacture of soft drinks, ice cream, pharmaceuticals, candy, and in preserving. The first large shipment left the plant last week for Los Angeles, Cal.

Mr. Evans, manager of the company, was in charge of the glucose, molasses and syrup industries division of the Food Administration during the war, and, owing to the extreme shortage of sugar and sweets that occurred, Dr. Smith, who was associated with him in the Baltimore plant, began experiments to produce a type of syrup or sugar from corn which would closely resemble

cane syrup in sweetness and would be free from the objectionable feature found in substitutes. The production of invertose started 90 days ago, when an experimental plant with a capacity of one-half barrel daily was started.

Oil Developments in Central and Southwest Oklahoma

Oklahoma City, Okla., October 1—[Special.]—Ripley, in Payne county, is to perpetuate the name and memory of the late president of the Santa Fe Railway Co. The Cimarron River village, by virtue of oil, may soon find itself carrying a double load of honor. An oil pool has not been definitely identified there, but gas has been found in such large quantities that an oil discovery is regarded as nearly certain to follow.

This is a specially interesting item of news, in view of the fact that no area of Central Oklahoma has been more closely lease-guarded by the big companies. A representative of one of them remarked, when the Shaffer Oil & Refining Co. found gas there in small quantities in an upper sand, that the State possessed no more clearly defined anticline. The immediate pool, if one is discovered, will be a big-company pool, for probably half a dozen of the biggest oil concerns have holdings there.

The Ripley play is a recent illustration of the belief of oil men that river-courses are indicative of the trend of oil-bearing formations. A score of Oklahoma pools along the Cimarron and Arkansas rivers were identified because of the relation of oil structures to these streams. At Guthrie the Cimarron took a decidedly northeastern course, emptying into the Arkansas in the southeastern corner of Osage county. The conjunction formed the apex of an inverted V. In the heart of the V the great Cushing pool was uncovered, and along the sides were found the Yale, Jennings, Quay and Terlton pools and the historic Glen pool itself.

The Maramec pool lately has produced some disappointments. At the southern edge of the townsite a few weeks ago the Parks well discovered the Cleveland sand, the first of a series of good producers in that part of the State. A short distance north of it the Jones well found the sand unproductive. Just east of the town the Maramec Oil Co. found the Skinner sand, the second good producer of the district, fairly productive, yet the Atlantic Refining Co. in an offset found the Skinner sand dry. South of the town the Pierce Oil Corporation found the Bartlesville sand, the deepest of the three, which yielded oil and gas in paying quantities, yet at the edge of Maramec two holes are reported to have found the sand dry. While these disappointments have cooled off wildcatters for the time being, the district is yet of interest, particularly west and southwest of Maramec, where leases only recently have sold for \$1000 an acre.

Lincoln county, which lies south of productive Payne and west of sensational Creek, has taken on new interest since the Jennings well, which found a big gas sand a few months ago, has been cleared of battered casing and is ready for a deeper test. Big companies recently have paid bonuses to landowners there to effect renewal of leases that they might have time to fulfill contracts by drilling. Lincoln county contains sections of highly prospective territory that has been neglected while proven pools were demanding immediate attention. Operators have asked the Commissioners of the Land Office for leases in the northern part of Pottawatomie county, which adjoins Lincoln on the south, and it would appear that wildcatting is to be extended into the southern county.

With a pool definitely located in the eastern part of Comanche county, that area is getting more activity than any other in Southwestern Oklahoma. An agent of the Kiowa Indian Agency at Anadarko is reported to have declared the Gladys Belle well, in 32-2n-9w, a paying producer, which means that the Carter Oil Co. and some others holding leases to Indian allotments in that region must at once begin the drilling of wells. Since the Gladys Belle is supposed to have been drilled on the western edge of the structure, activity is heading southeast, east and northeast. Nearly the whole of Comanche county, including marginal areas along the southern part of the Wichita Mountains, is being tested.

Two recent completions have definitely proved extensions of the Cement pool. One of these is on the northwest, which will lead wildcatting toward the Canadian River, and the other is on the southeast, which will lead to tests in the western part of Grady county. No unproven territory of Western Oklahoma is considered more likely of production than that lying between Rush

Springs and Marlow and the Cement and Comanche county pools.

The Wrightsman Oil Co. has completed a gasser in the Roberson district of Garvin county that is making 25,000,000 cubic feet daily, and doubtless, drilled deeper, would be as productive as the Magnolia well, which it offsets. Wrightsman has another Magnolia offset on the sand, and this may be drilled below the gas sand. The Magnolia has four wells drilling in as many different sections of the structure, and October should witness several completions in that area. Interest is largely in territory south of the gassers, and the country is being prospected all the way down to Carter county fields.

Regularity of completions and gradual extensions of the producing area to the north, northwest and northeast mark the Hewitt district of Carter county. Wells making 500 to 600 barrels have become common there, and the daily output of the field is nearing the 35,000-barrel mark. More activity is noted to the south and crossing Love county. One of the latest tests started in Love county is that of the Shaffer Oil & Refining Co., a few miles north of Red River.

There is no letup over the entire northern part of Carter county and nearly the entire eastern part of Stephens county, where shallow pools are found by the score. Of special interest in that region is the drilling of deeper tests. The Magnolia, the Lone Star and the Empire are taking the lead in this, and at the same time increasing equipment for drilling out the shallow areas.

Some completions designed to extend the Walters field west and south are nearly due, and others in the new gas district of Grant county. There is a revival of interest in Custer county, where several wells were started last summer. Leasing is active in the Panhandle counties of Cimarron, Texas and Beaver.

The Big Gas Field Near Amarillo—Industries Present and in Prospect.

Amarillo, Tex., September 30.

Editor Manufacturers Record:

The oil and gas men of the United States are doubtless familiar with the fact that the greatest field of natural gas yet discovered has been found a few miles north of Amarillo. It is the greatest for two reasons, namely, the vast area of the field as proven and the enormous production of the wells. Thus far wells sunk to the heavier producing gas sand have revealed one well that has been measured and produced 107,000,000 cubic feet of gas per day. Another well, being sunk for oil and located 40 miles from the big gasser, produced 50,000,000 cubic feet, and the gas sand was barely entered when the well was capped. Another well located about 40 miles from Amarillo, in the county to the north of this—Potter—has just penetrated the gas sand, and is producing 20,000,000, with no forecast as to the quantity it will yield when the sand is further penetrated. A well about three miles from Amarillo passed through this gas sand after making a showing of a half million cubic feet per day. Practically every well that has been sunk for oil or gas has found large quantities of gas at a depth of about 2300 feet, and thus the field as proven to date is about 40 miles square in area. It is thus the largest in area in the world and contains the largest producers.

While a thorough surface survey for minerals capable of being converted into commercial products has not been made, it has been proven that there are clays of many kinds in this section, particularly along the breaks of the Canadian River. Sand suitable for the manufacture of glass has been found, also rock for lime and possibly for cement, although this latter has not proven to exist in quantity, but it is there.

While a big smelter project has been offered Amarillo, the deal has not been closed as yet, and the only factory based upon the presence of all this gas is a brick and tile plant to be installed by the Amarillo Brick & Tile Co., capitalized for \$100,000, just as soon as the machinery arrives. The company manager asserts that brick will be offered on the market here by December 1. Another project for utilizing a deposit of shale is being promoted, and other manufacturers are looking in this direction.

There is just being completed a flour mill with a capacity of 5000 barrels a day, in connection with which is an elevator with 500,000 bushels capacity. This mill handles the wheat grown in this section of the Panhandle. The crop this year is estimated at 20,000,000 bushels, and was of high grade. Other agricultural

products are the sorghum maizes, which do most excellently in practically all seasons, oats, barley, alfalfa, Sudan grass and a fine grade of short staple cotton, produced in the lower altitudes of the Plains. Because it is not ravaged by weevils and worms to the same degree, cotton in the Plains regions will produce a bale to the acre, and sometimes two. The proximity of the cotton fields to the gas field has given rise to the suggestion of a cotton mill for Amarillo.

Amarillo is using natural gas for domestic and industrial purposes, but the pipe lines have not been extended beyond the city, and probably will not be until the price of pipe and labor are reduced. Hence, there is gas for the use of a large number of manufacturers in any number of lines, a fact which the oil and gas division of the Texas Railroad Commission, which looks after the conservation of these products, has publicly announced.

EDWARD E. TALMAGE.

Deep Test Wells in Union County (Arkansas) District.

Monroe, La., October 1—[Special.]—Union county, Arkansas, which borders the big oil fields of Louisiana, now gives promise of being the next producing oil region. Developments centering in that country radiate for fifty or more miles into Ouachita, Columbia and other border counties. While Ouachita county was the first to produce oil at the famous S. S. Hunter well, brought in by the chief owner of one of the leading gas-producing companies of Monroe, prospectors are inclined to the opinion that Union county is the center of the pool, as it is now the central point of large developments. At Mitchell, Bonham, Union Petroleum, Constantine No. 2 and Congress wells, in Union county, these developments are being watched with a great deal of interest. Constantine No. 1 well of the Constantine Oil & Refining Co. of Tulsa, Okla., will transfer its output to El Dorado, Ark., the municipality having contracted with the Oklahoma concern to pipe its gas to operate public utilities and supply consumers of the Arkansas town.

Congress well, not far from Constantine No. 1, will be drilled in within the next few days at 2300 feet. Other wells in the vicinity are also getting ready for the final test. The Standard Oil Co. of Louisiana is drilling in Hunter No. 2, in Ouachita county, which has a showing of oil. The Camden well, on the Missouri Pacific Railway, is ready to be brought in. The Louisiana Oil & Refining Co. is planning a test of its well near Hunter No. 1.

In all, at least 15 deep-test wells, undertaken by big interests for the purpose of finding oil in Union, Ouachita, Columbia and adjacent counties, will be thoroughly tested out within the next two or three weeks. On these tests depend largely the future development of the Southern Arkansas fields.

Will Florida Be a Great Oil Field?

B. M. Cates, president of the Bonheur Development Co., Tallahassee, Fla., writing of the activity in drilling for oil in Florida, states, "we are confident that Florida is destined to be a great oil field."

Denying reports that his company had brought in a 500-barrel well, he said:

"We are drilling for oil 16 miles south of Tallahassee in Wakulla county. We have one well down 2169 feet in which we found oil and oil sands at several points. At 956 feet we believe we have a pay sand and at from 1950 feet to the bottom of the hole we have exceedingly good sand full of dark oil, but this hole was lost in October by driller losing a string of tools and otherwise junking the hole. We have a second well down 1500 feet and expect to carry this down for a deep test, and believe we will make a strike before we reach 2500 feet, but we expect to go 4000 feet if necessary."

"Wells are being drilled at Chipley, Clarksville, Wakulla and DeFuniak Springs, and a standard rig is on the ground for deep test just eight miles from our Wakulla wells. This is largely limestone formation and will in the main be cable drilling, but it may develop that the rotary can be used in parts of the fields at a later day."

Bright Outlook for Natural Gas Supply in Southern Oklahoma.

Pauls Valley, Okla., October 1—[Special.]—Prospects of a substantial increase in the natural gas supply in Southern Oklahoma are made brighter by the completion of the third big gas well in the Roberson district of Garvin county. It was drilled by the Wrightsman Oil & Gas Co. of Tulsa as an offset to one of the gassers drilled a few weeks ago by the Magnolia Petroleum Co., and is making in excess of 20,000,000 cubic feet daily from the sand level of about 1250 feet.

The outlook is so encouraging that Wrightsman has promised to lay a pipe line from the field to Pauls Valley if there is a local demand for the gas, and to lay branch lines to Wynnewood on the south and Purcell on the north. He mentioned the likelihood of a line to Oklahoma City.

Interest is lax, however, in the matter of installing gas systems in these towns because of the short lives of a gas wells and the difficulty of getting pipe and other equipment. But there is no question of such systems being installed if it be proven that the gas-producing area is large and that the wells give proof of even ordinary life.

In Garvin county, the southern part of McClain county and the western part of Murray county wells are drilling or locations have been made to the number of about 25. Several of these are by the Choate Oil Corporation of Oklahoma City, the latest big company to enter this district. The number of tests is unusual considering the area of pure wildcat territory they cover.

Oil in paying quantities seems to have been found at 1600 feet in the well of Wharton and associates in the Cruce gas field of Stephens county. Wharton has found an oil sand 30 feet thick. The hole is not yet in condition for a test, but indications are for a well of 100 barrels or more. This is the biggest well found in the north half of the east side of Stephens county. Several locations have been made within one mile of it.

C. P. Nicholson of Indiana, who first did serious wildcatting in Garvin county and spent his fortune of over \$50,000, after several years of difficulties and delay is about to have his dream of a deep test come true. He has contracted with the Choate Oil Corporation of Oklahoma City to complete the well, now 3100 feet deep, to 4000 feet. The test is well located geographically, it is said, and two or more important oil and gas sands have been found.

A new test of interest is that started a few miles south of Purcell by the Allendale Oil Co. of Fort Worth, with whom are associated some Oklahoma operators. The location is not far from the South Canadian River, bearing relation to that stream similar to the fields of Allen and Francis in Pontotoc county. A few miles to the west, on a like location, the Crossman Oil & Gas Co. of St. Louis is starting a test.

Eastern interests are reported negotiating for leases in a region of Carter and Murray counties, where a low-grade oil is found at a shallow depth. A special use for this oil, or a new method of refining it, is said to have been found. One well on the farm of a negro landowner has been producing this oil for several years. The negro dug a cellar around the hole and installed a stairway that enabled him to dip the oil out with a bucket and carry it to the surface. He has sold the oil profitably for lubricating purposes.

This well is but a few miles from the liquid asphalt wells in the neighborhood of Dougherty, and probably owes its slow gravity to the asphalt base.

Leasing is inactive over this region, due principally to the fact that virtually all land thought valuable for oil or gas is in the hands of lessees who expect to develop it or hold for higher prices after fuller development.

Wildcat Operators Still Hopeful of Finding Oil.

Monroe, La., October 1—[Special.]—As a result of the most far-reaching campaign for oil yet undertaken in wildcat territory in this State, 120 locations have been made in 12 different Northeastern Louisiana parishes, and drilling is under way on 50 wells up to the present time. The campaign began a year ago, and many millions of dollars have thus far been expended and no oil has yet been found. Operators are still confident, however, and the campaign will be continued for at least another year, it is announced by some of the leading men behind the industrial devel-

opments. The locations and drilling include Ouachita, Morehouse, Richland, Union, Caldwell, East Carroll, West Carroll, La Salle, Jackson, Lincoln, Catahoula and Rapides parishes, covering a wide area of territory. An illustration of the faith of operators in the Northeastern Louisiana fields is shown by the fact that leases are selling in this territory now, after a year of fruitless effort, for an average of \$10 an acre, and in many instances as high as \$50 an acre.

Natural Gas Possibilities of Texas Panhandle Considered Almost Unlimited—To Be Thoroughly Explored.

Amarillo, Tex., October 2—[Special.]—Logs of gas wells drilled in the Panhandle and surface indications in disturbed areas have led to a detailed geological study of this part of Texas that already is under way and will continue several months. The geological department of the University of Texas is to take part in the explorations, and probably the United States Geological Survey will detail a geologist to assist.

Clays and sulphates are to be studied specifically. Indications of leads and zincs, and possibly of copper and silver, are said to be found. The survey is of interest most to those who hope to develop mining enterprises in which natural gas may be used. The natural gas possibilities of the Panhandle appear to be almost unlimited. Big producing wells have proven a territory nearly 50 miles long.

Speculation as to the probable oil and gas producing areas lately has found attractive fields north of the Amarillo gas field and extending across the Oklahoma Panhandle counties and to Lamar, Colo., where oil recently was discovered, probably in paying quantities. The north half of Cimarron county has been specially attractive. It is a broken region that lies along the Cimarron River, nearly all of it belonging to the State of Oklahoma. Gas fissures are found in streams and along the sides of canyons.

Structural maps of that region are said to have been made by geologists of at least three major oil concerns, and one of them, the Empire Gas & Fuel Co., has hundreds of thousands of acres under lease in Cimarron and adjoining counties in Texas, Colorado, Oklahoma and New Mexico.

Robert Lunsford, formerly a Pennsylvania oil operator, who several years ago was oil and gas agent of the Commissioner of the Land Office of Oklahoma, first worked out the territory and recommended its being leased. The State subsequently leased nearly 100,000 acres in that county. Later a geologist formerly in the University of Kansas, and later in the employ of the Sun Company, made a survey of the region and picked structures which he said were created by an uplift that connected the Rocky Mountains with the Wichita Mountains of Oklahoma. He predicted oil or gas on either side of the uplift. Later the Amarillo gas field was discovered on the south of it. A few weeks ago gas was discovered at Liberal, Kan., on the north of it.

Several tests are drilling in Potter, Moore, Hartley and Dallam counties between the Amarillo gas field and the Cimarron county breaks. Other tests are drilling to the northeast, extending across Oklahoma and into Kansas.

In Woodward county Oklahoma, the Rhodes Oil Syndicate of New York has made a location and has timbers assembled. In that county the Enid Standard Oil Co. of Enid, Okla., has a test drilling at about 3000 feet, and recently it contracted with Wichita (Kan.) operators to continue it to 4000 feet. Near Buffalo, Harper county, Oklahoma, a test is below 3000 feet. In the vicinity of Camargo, Okla., which is in Dewey county, a Chicago coal-mining company, with interests in Colorado, is considering a block of acreage which its geologists now are going over. Near Arnett, Ellis county, Oklahoma, the Chicago Oil & Gas Co. of Chicago and Gage, Okla., has started a deep test.

An oil sand is reported to have been found at about 1900 feet in the west central part of Dallam county, Texas. The formation is very hard, and probably will be shot.

The Shamrock Oil & Gas Co., which recently brought in a 25,000,000-foot gasser in the southern part of Moore county, has been superseded by the Masters Oil & Gas Co., which is to retain the well for gas, and complete another near it into deeper formations. Col. Will A. Miller, Panhandle capitalist, has contracted for the deepening of his Panhandle test from 3000 to 4000 feet.

Building Construction Interests Form National Congress

REPRESENTATIVES OF SIX BRANCHES OF THE INDUSTRY ADOPT PROGRAM TO BRING ABOUT IMPROVED CONDITIONS THROUGHOUT THE COUNTRY.

[Special Correspondence Manufacturers Record.]

Chicago, Ill., September 28.

The National Industrial Congress of Building and Construction was created today in a room on the eighteenth floor of the Hotel LaSalle that contained 36 leaders of the various component parts of America's giant building industry in conference.

After a day of discussion in which various conflicting opinions were presented, the knowledge that something is wrong with the operation of the construction industry cemented together the representatives of the contractors, the architects, the engineers, the building material men and the labor unions of the United States and resulted in the appointment of an executive committee to perform the following duties:

Arrange for the first meeting of the national congress on or about June 1, 1921.

Diagnose the ailments of the industry meanwhile in a series of studies to include all sectional problems.

Promulgate publicity tending to encourage construction, particularly of homes.

Bring together in co-operation every element of the industry to promote its efficiency and public good.

Develop an understanding of the interdependence of the various factors of the building industry and a working arrangement to promote harmony.

Seek means of encouraging investment in building projects, particularly to relieve the housing shortage.

Delegates were appointed to the executive committee, which will be increased to 20 members and include two representatives of each branch of the industry as well as two representatives of the Investment Bankers' Association of America. The names of the delegates and the branch of industry they represent are as follows:

Gen. R. C. Marshall, Jr., Washington, D. C., general contractors.
Robert D. Kohn, New York City, architects.
Thomas R. Preece, Indianapolis, Ind., labor.
Morris Knowles, Pittsburgh, Pa., engineers.
Wharton Clay, Chicago, Ill., material men.
Louis K. Comstock, New York City, sub-contractors.

The conference which followed was an outgrowth of the conference at Atlantic City in August where, in private session, the various factors agreed that the plight of the building construction industry was indeed serious. The meeting was opened with a statement by Robert D. Kohn of the American Institute of Architects, appointed temporary chairman.

"Things are perfectly rotten in every branch of the building industry," he said. "I think we should find out the reason. The architects are partially responsible and I want to admit it and point out some of the other fellows' deficiencies."

"Where is the building industry going? That's the thing for us to find out. What's the matter with us? It's about time we knew. We need an organization not to fight labor fights but to diagnose the trouble with building construction."

"We have failed. Building has stopped. The 'own your own home' campaign has been preposterous. The old scheme of building only for profit has failed. We must now consider the health of the industry itself. A general building and construction congress is the answer. We must co-ordinate the various elements and get them working in harmony."

F. E. Davidson, Chicago architect, in his discussion suggested tax exemption for real estate mortgages to stimulate building.

"The bankers won't invest in real estate mortgages for reasons too apparent to mention," he said. "What we must have is exemption from taxes for all money invested in new construction for a period of years. Repeal the excess profits tax and substitute a small tax on sales."

General Marshall, the next speaker, sounded a warning to organized labor. He addressed his remarks to John H. Donlin, head of the building trades department of the American Federation of Labor, who was present.

"Unless organized labor will maintain a reasonable attitude toward the other elements of construction which have a com-

mon interest with it, these other elements will go to the other extreme," he declared.

"First one and then the other starts the pendulum to swinging and the pendulum swings almost as far in one direction as from the point from which it started in the other direction. And it is this pulling first from one side then to the other that has produced the chaotic condition that exists today."

"Insistence on a labor monopoly or an employer monopoly of the conditions of labor under the non-union shop, the closed shop or any other name, is bound to bring reaction after reaction according as circumstances give the power to one or the other.

"In the building trades labor is largely organized and should be ready to deal with employers. By many it is considered that their right to do so is fundamental. Also the right of the employers to contract with whom they please is fundamental."

"If the trade unions of the building industry perform the services for their members and the corresponding crafts which they are in a position to perform, I believe that they need not fear to recognize the right or freedom of contract for the individual, and if they will recognize that right, the construction employers of the country will, I believe, not only recognize but also come to adopt collective bargaining through the unions as a more satisfactory means of handling labor questions because of the very nature of the industry and because of the fact that the building industries are organized."

"If labor will not recognize that right and if they insist on accompanying the recognition of collective bargaining with the abrogation of the right of free contract, it has only one result—possibly endless warfare, and this is the thing that this congress will be brought together to stop."

Mr. Doulin in his remarks did not reply directly to General Marshall's statement.

"The trouble with the building industry is that we are not organized," he said. "We suffer from too many things. Daniel Willard, the railroad man, said the other day that the roads were giving priority to shipment of coal to Europe. We need coal."

"Now if we were organized we could get out and boost every angle of the industry. After we became one big unit we could get legislation and appear before the Interstate Commerce Commission and get priorities. If labor was responsible for the stopping of building, the congress could call labor in and demand an explanation and a remedy."

John R. Wiggins, builder, of Philadelphia, replying to this suggestion said:

"If we are going to have an organization that will take care of all of us, it should be able to settle disputes between the different interests."

"The one big unit idea is impossible. No one element will give up its rights to the general organization."

"As a matter of fact haven't we raised the price of building about 150 per cent? Hasn't labor, contracting, architects' fees and the price of material gone up?"

"The bankers are afraid to invest in building for fear that values will recede and they will be insufficient to cover the amount of their loans."

"My suggestion is this: Bring down the cost of building to a valuation that will be permanent enough to encourage bankers."

A committee of ten, with Louis K. Comstock, representing the Electrical Contractors' Association of New York City, as chairman, was appointed to consider a means of organizing the congress. After presenting resolutions providing for the appointment of the executive committee and the holding of the congress, Chairman Comstock said:

"The committee believes that a study of the building industry is necessary. We must also harmonize the different groups in the industry. If all elements can be brought together and made

to work in accordance with the fundamental rules of the industry we can present a solid front to Congress, to the commissions and to the bankers. If the building industry will move forward with united lines it can get anything it needs within reason."

The resolutions were adopted and the executive committee held its organization meeting after the main conference closed. During the final few minutes of the meeting \$3000 was pledged to support the work of the executive committee, pro-rated at \$500 from each of the six branches of the industry.

Among those attending the conference were the following:

Robert D. Kohn, American Institute of Architects, New York City.
Gen. R. C. Marshall, Jr., Associated General Contractors of America, Washington, D. C.
A. J. R. Curtis, Portland Cement Association, Chicago.
G. W. Buchholz, Associated General Contractors of America, Chicago.
A. C. King, mechanical and electrical engineer, Chicago.
Louis R. Barras, The Foundation Company, New York City.
William Cooper, Associated General Contractors of America, Washington, D. C.
Louis K. Comstock, Electrical Contractors' Association, New York City.
Francis C. Shenehon, civil engineer, Minneapolis, Minn.
H. B. Gill, Associated General Contractors of America, Chicago.
Charles H. Whitaker, American Institute of Architects, Washington, D. C.
W. N. Young, Building Trades Council, Chicago.
R. J. Smith, contractor, Chicago.
Charles J. Lammet, Building Trades Council, St. Louis, Mo.
Thomas R. Preece, Bricklayers, Masons and Plasterers International Union of America, Indianapolis.
William J. Bohn, Bricklayers, Masons and Plasterers International Union of America, Indianapolis.
Thomas Redding, Amalgamated Sheet Metal Workers, International Alliance, Chicago.
Richard E. Schmidt, architect, Chicago.
Benjamin Wilk, Universal Portland Cement Company, Chicago.
William J. Spencer, Building Trades Department, American Federation of Labor, Washington, D. C.
John H. Donlin, Building Trades Department, American Federation of Labor, Washington, D. C.
W. G. Luce, contractor, New York City.
G. F. Weber, National Brick Company, Chicago.
Morris Knowles, engineer, Pittsburgh, Pa.
John R. Wiggins, builder, Philadelphia, Pa.
W. A. Rogers, Associated General Contractors of America, Chicago.
E. J. Russell, architect, St. Louis, Mo.
Sullivan Jones, architect, New York City.
F. E. Davidson, architect, Chicago.
C. V. Binghart, contractor, Chicago.
C. C. Crockett, Hollow Building Tile Association, Chicago.
P. R. Price, Marquette Cement Company, Chicago.
C. C. Wright, civil engineer, Chicago.
Max Dunning, architect, Chicago.
Wharton Clay, Associated Metal Lath Manufacturers, Chicago.
John Griffiths, contractor, Chicago.

Increased Interest in Live-Stock Farming—What the Dairy Industry Means in One Mississippi Town.

Jackson, Miss., October 2—[Special.]—A concerted movement is on in this territory to increase interest in dairying, livestock farming and trucking. The continued exodus of negroes from the larger farms has brought about the necessity for small farming, with more attention to food crops than to cotton, which must be grown on a large scale to be profitable, and which requires a maximum of labor, not only for planting and growing, but for picking.

A plan is under way for the bringing in of immigrants, carefully selected for their possible assimilability with the native stock and for their wholesome political ideas, who will develop the country with the small farms that have made certain parts of Europe so prosperous.

Dairying has made steady progress in the State for the past ten or fifteen years, and the many creameries that have been established have been almost uniformly successful.

An example of what the industry means to small agricultural communities is to be found in Wesson, once the site of the largest cotton mills in the State. When the boll weevil laid the cotton-growing and spinning industries temporarily in ruins, the community was on the verge of bankruptcy.

A few farmers, without concerted effort, were shipping milk to New Orleans, and had found the practice profitable. Forced to turn to some new means of making a living, other farmers entered the dairy business in a small way. Prosperity came swiftly, and improvement of herds began, until today the town, which is still small, ships 5000 gallons of milk and the same amount of cream to New Orleans every day.

The receipts from the sale of these products are far in excess of the largest payroll of the cotton mills, and the community is prosperous to a degree that reminds one of the Middle Western dairy centers. Every dairy farmer of any consequence owns auto-

mobile trucks and passenger cars, and there is a general air of prosperity about the town that was never there when it depended upon cotton and cotton mills.

Wesson is only one of many communities in the State that have been virtually made over by the development of the dairy industry or the production of some other small farm commodity.

Gradual Marketing of Cotton Crop Favored by Federal Reserve Bank of Dallas.

Dallas, Tex., October 2—[Special.]—The Federal Reserve Bank of Dallas favors a gradual marketing of the cotton crop distributed practically throughout the year, rather than warehousing of the crop for an indefinite period, or until the price can be dictated. The bank's position on the marketing question is given in its monthly review of business and industrial conditions in the Eleventh Federal Reserve District, issued this week, as follows:

"As a result of the recent depression in the cotton market, efforts are being made to perfect an organization among the cotton-growing interests to foster a general holding movement for the purpose of obtaining a much higher price for the staple. There appears to be some difference of opinion as to the extent to which this holding movement should or can be carried out. There is a sentiment among some of the growers, particularly those who are financially independent, in favor of warehousing the crop for an indefinite period of time, or until they are able to practically dictate the price of cotton. On the other hand, there is a well-organized group of producers, who are apparently in the majority, whose program contemplates not an indefinite holding of the crop, but a gradual marketing of their product distributed practically throughout the year, releasing from time to time only a sufficient amount to liquidate the indebtedness incurred to finance the planting and growing of the crop, and to prevent any general dumping on the market of cotton for which there is little or no demand.

"With the latter plan the Federal Reserve Bank of Dallas is in entire accord and sympathy, and believes that its position is generally shared by its member banks. In other words, it favors ordinarily such extension of credit as will assist the growers to realize a normal price; that is to say, such a price as would naturally follow the operation of the laws of supply and demand where the crop is marketed gradually and over a series of months, as distinguished from allowing it to be either unloaded upon the market too precipitately, or indefinitely withheld from the market for the purpose of obtaining an arbitrary price. Any other course is not only clearly incompatible with the present credit and warehouse situation, but would be inconsistent and indefensible in a period of readjustment such as the present time, when each industry is entitled to receive its share of available credit in return for bearing its share of the common burden."

\$2,000,000 in Improvements Recommended for Shipping Facilities of Houston.

Houston, Tex., September 30—[Special.]—The Houston Harbor Board has submitted a recommendation to the City Commission that municipal bonds in the sum of \$2,000,000 be issued for the building of additions to the dock and wharves of the city on the Ship Channel, the construction of extensions of the Municipal Belt Railway and the purchase of additional channel frontage. The report says that the additions are needed to properly care for the shipping that is coming and seeking to come to this port. The board suggests that the Municipal Belt Railway be extended from a connection with the Houston Terminal Railway on the International & Great Northern Railroad on the north side of the Ship Channel to Galena, so as to serve various industries, including the city's cotton wharves. It is expected that the City Commission will favorably act upon the recommendation.

The Cotton Movement.

In his report of October 2, 1920, Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during two months ending close of September was 1,037,158 bales, an increase over the same period last year of 107,255 bales. The exports were 414,662 bales, a decrease of 309,630 bales. The takings by Northern spinners were 122,049 bales, a decrease of 96,530 bales; by Southern spinners, 384,252 bales, a decrease of 854 bales.

THE IRON AND STEEL SITUATION

Steel Mills Still Well Provided With Orders—Relation of Automobile to Steel Prices.

Pittsburgh, Pa., October 4—[Special.]—With occasional exceptions, the steel mills are still well provided with orders upon which to operate at the fullest rate that physical conditions permit, and thus there is little disposition to reduce prices, except on the part of some of the smaller mills that have been securing particularly fancy prices by keeping their order-books relatively clear and thus being able to make prompt deliveries. At the present time prompt deliveries in most, if not all, commodities do not command higher prices than those charged by independent mills for deliveries in the next few months. Thus one of the three steel markets has disappeared. There remain two markets, the Steel Corporation market, at the Industrial Board prices of March 21, 1919, and the independent market, at prices various amounts higher. While independent prices cannot be quoted precisely in all cases, the following represents approximately the spread, the Steel Corporation and independent prices, respectively: Billets, \$38.50 to \$55 or \$60; sheet bars, \$42 to \$60 or \$65; bars, 2.35 to 3 cents; shapes, 2.45 to 3.10 cents; plates, 2.65 to 3.25 cents; blue annealed sheets, 3.55 to 5.25 or 5.75 cents; black sheets, 4.35 to 6.75 or 7 cents; galvanized sheets, 5.70 to 8.50 or 9 cents; wire nails, \$3.25 to \$4.25; standard steel pipe, 57½ per cent off list to 54 per cent off list. Thus the spreads between Steel Corporation and independent prices range from \$7 a net ton on pipe to about \$60 on galvanized sheets.

Automobile and Steel Prices.

The list of automobiles that have been reduced in price now includes Locomobile, Mercer, Franklin, Studebaker, Crow-Elkhart, Overland and Ford. Here are all classes of machines represented. One can now buy one Locomobile and three Fords for the same price as had to be paid a month ago for a Locomobile alone. The steel trade expects practically all cars to come down, and does not take seriously the statements given to the press by some makers that they will not reduce their prices, making the prediction that such makers will be sorry eventually that they placed themselves on record in that fashion.

The steel trade wants it distinctly understood that it is not going to reduce steel prices because automobile prices have declined. Steel prices may come down; in fact, it is absolutely certain that they will, but there is no direct connection. The automobile industry cannot offer the tonnage necessary for a lever to pry prices down. A carefully-made estimate of steel consumption in the present calendar year by the passenger automobile, the truck and the tractor industries and of the steel production in the calendar year shows that the former will be about 4.4 per cent of the latter. Moreover, the automotive industry is not now in position to offer any large part of its business to the steel industry because it is running very slack and has a good bit of steel still under contract. Many automobile factories and parts factories have contracts running to the end of the year. General Motors is commonly reputed to have a large contract running through next June. Such a contract would be with the Steel Corporation at the Industrial Board prices of March 21, 1919, and car prices would have to be reduced below the level of that date before there would be even a talking point.

Assuming that, as seems altogether likely, the independent prices will recede to the Steel Corporation level, after a long period during which the independents argued that the Steel Corporation would have to advance to their level, an interesting comparison is made to show how entirely out of the question it would be for the Steel Corporation to reduce its steel prices on account of the automobile trade. Obviously, of course, the Corporation would not make a special price to that industry. It would be vastly less unlikely to make special prices to the railroads than to the automobile industry, and it is quite improbable that it would do even that. Therefore, any reduction conceivable would be a sort of horizontal reduction, affecting all the Steel Corporation's steel products. The comparison, then, is between a reduction on the Steel Corporation's output and the cost of building an automobile. The Corporation's capacity, conservatively estimated, is 16,200,000 tons a year, so that a fair year's output would be more than 15,000,000

tons. As the common shares outstanding amount to about \$508,000,000, a change of a dollar a ton in prices realized on the output is equal to 3 per cent on the common stock. An automobile that has been selling at from \$2000 to \$3000 does not involve as much as a gross ton of steel in the form in which the Steel Corporation sells steel. Thus what would be equivalent to 3 per cent dividend on "steel common" is equal to less than \$1 in the cost of a \$2000 to \$3000 car, and the Steel Corporation cannot help the automobile makers to "recoup" when they reduce prices \$150 or \$300 or \$400.

Production.

Here and there in spots are cases of a mill having to curtail its operations on account of insufficiency of orders, but in general the steel industry is well enough supplied with orders to operate as well as physical conditions permit. The physical conditions are more favorable than for a long time past, perhaps more favorable than since the late months of 1916. There is still some shortage of Connellsville coke, but taking the industry as a whole, that is no great item. Transportation conditions, while not perfect, are further improved. There is a sufficient labor supply, and in nearly all iron and steel-producing districts except Pittsburgh there is understood to be a surplus of labor. Labor generally is still more efficient, though as to the iron and steel industry it has been fairly efficient for about six months past. The weather conditions are very favorable. Indeed, it is traditional that October and March are the record months of the year for iron and steel output. It is quite possible, therefore, that the present month will make a new record in production. If it does not, the cause will probably be lack of orders at a number of the plants, though not at all. The record rate in steel ingot output is that made in October, 1918, when the rate was about 45,400,000 gross tons a year. The rate last July was 39,900,000 tons, while August showed an increase to 42,700,000 tons, so that the passing of a 45,400,000-ton rate this month would merely be in keeping with the rate of improvement shown from July to August, and August was still a midsummer month.

The Pig-Iron Debacle.

All the pig-iron markets except Birmingham and Chicago advanced during August. The point about those advances was that while prices went up, to the satisfaction of the furnaces, that was all that occurred. No large tonnages were bought, but, on the contrary, buying simply ceased, and of late the markets have been absolutely stagnant. One is reminded of a lecture by the late Mark Twain. The lecture was on "Methuselah," and the gist of it was: "Methuselah lived 969 years, but what of it—nothing happened!" It is easy to criticise the furnaces and say they killed their market by advancing prices, but no one can prove that if the advances had not been made the market would have been active. From one viewpoint the buyers are rather curious people, and sometimes they buy for no other visible reason than that prices are advancing. There is the very interesting case of the market in the last five months of 1916. In August the pig-iron market was absolutely dead at \$18 to \$18.50 in several Northern markets and at \$14 Birmingham. A large merchant interest in the North was determined to sell iron, and it started out by cutting prices. A buying movement began, prices commenced to advance. In four months Northern iron was about \$30 and Southern iron \$25. The buyers put up the market, but they had to be bribed to begin buying.

The trade now holds that foundry pig-iron at valley and Cleveland furnaces has declined from \$50 to \$47. Only a little transaction occurred to show a \$47 price, but it is commonly believed that on an attractive inquiry a buyer could do \$47, or possibly even less. So the great event of pig-iron reaching \$50 has come and gone, and only the statistical compilations that will be handed down to future generations are enriched.

Increased Coal Production.

The week of September 25 was marked by an increase in the production of bituminous coal and a general resumption of work in the anthracite region, says the United States Geological Survey in its weekly report under date of October 4. The total output

of soft coal (including lignite and coal coked) is estimated at 11,817,000 net tons. Unless later revised downward, this figure will stand as the largest production in any week since last January, not excepting the second week of August, which benefited by the cars accumulated during the daymen's strike.

The rate per working day was 1,969,000 tons, the highest, with one exception, since last January, the exception being the five-day week of Labor Day.

Preliminary reports indicate that production on Monday and Tuesday of the present week (September 27 and 28) was at least equal to that on the corresponding days of last week.

Production during the first 228 working days of the last four years has been as follows (in net tons):

1917.....	406,179,000	1919.....	311,276,000
1918.....	436,936,000	1920.....	392,747,000

The year 1920 is thus about 13,500,000 tons behind 1917 and a little over 44,000,000 tons behind 1918, but is 51,500,000 tons ahead of 1919. In this connection it should be remembered that production during 1918 exceeded consumption and provided for a net addition to consumers' stocks by the end of the year of approximately 30,000,000 tons. In 1919 the condition was reversed, consumption exceeded production, and there was a net draft on stocks of perhaps 40,000,000 tons for the year.

A general resumption of work in the anthracite regions brought the total production for the week ended September 25 up to 1,650,000 tons, or within 168,000 tons of the output during the last week before the strike.

The production of beehive coke continued to fluctuate around the 400,000-ton mark during the week ended September 25. The total output, estimated from shipments over all the large coke-carrying railroads, is placed at 401,000 net tons, as against 403,000 during the preceding week. Production decreased in Pennsylvania but increased in Virginia, Kentucky and Alabama.

The cumulative output from the beginning of the year now stands at 15,694,000 net tons, an increase of 1,200,000 tons over the corresponding period of 1919.

The Lake movement fell off sharply during the week ended September 25. Bituminous coal dumped at Lake Erie ports is reported as 888,993 tons, of which 849,781 were cargo coal and 39,212 vessel fuel. This was 118,840 tons, or 11 per cent, less than during the preceding week, and was but little better than the performance during the five-day week of Labor Day. Although greater than the corresponding week of 1919, in comparison with 1918, the week showed a decrease of 359,000 tons.

The cumulative Lake movement from the opening of the season now stands at 14,867,000 tons, as against 21,665,000 in 1918 and 18,448,000 in 1919. The year 1920 is thus still far behind 1918, but is overtaking 1919. It is about 6,750,000 tons behind 1918, and is still 3,500,000 tons behind 1919.

The movement to tide again declined slightly. Total dumpings were 24,272 cars, a decrease of 164 cars when compared with the preceding week. The decrease occurred at New York. At Philadelphia dumpings held their own, and at Baltimore, Hampton Roads and Charleston they increased.

Out of a total dumped amounting to 1,277,000 net tons, 264,000 tons went to New England and 582,000 were for export.

A decrease was reported in the tonnage of soft coal passing the Hudson gateways bound for New England. The total forwarded during the week ended September 25 was 5387 cars, as against 5824 during the week before and 5790 in the corresponding week of 1919.

Production of anthracite during the month of September, 1920, is estimated at 4,580,000 net tons. As the average September production since 1913 has been 7,700,000 net tons, the loss of output during the recent strike of the anthracite workers may be placed at 3,120,000 tons. The loss has caused the cumulative production since April 1 to fall behind the corresponding figure for any of the past seven years. Whereas, up to the opening of the strike the 1920 cumulative production exceeded that of 1916 and 1918 and nearly equaled 1915, the close of the strike found 1920 a few thousand tons short of the mark of 1916 and from 2,500,000 to 10,500,000 tons below other recent years.

Southern Pig-Iron Producers Confident Despite Lull in Market.

Birmingham, Ala., October 4—[Special.]—The lull in the pig-iron market, which has become more marked during the past week, has not shaken the confidence of the furnace company officials who are firm in their belief that immediately after the national election there will be a resumption of activity in the trade. But few sales are reported for the past week in the Birmingham district, and in each instance the sales were in a few hundred tons lots. There has been no cessation of activity in the shipping of iron from here. The cancellations of contracts did not amount to a very large tonnage, and consumers are not evincing any idea that they will not want the iron they ordered some time past. While the railroad car supply is decidedly better than a few weeks ago, it is not believed that all the accumulated pig-iron on furnace yards in this district will be shipped out by the end of the year. Iron is going out, however, in steady quantity and in every direction. Another indication of firmness of the iron market are the inquiries coming in, asking as to iron for delivery during the first half of the coming year, and also the quotations fixed by the Southern manufacturers, on a basis of \$42 per ton, No. 2 foundry, 1.75 to 2.25 per cent silicon. Iron men here do not believe that it is necessary to offer concessions on the quotations to bring about trading, and the prospects are that when the buying starts in again it will be on this basis as to price. Practically all of the probable make of the last quarter of this year has been sold. Orders for a few hundred tons each could be accepted, delivery during last quarter of this year. Sales for delivery during the first quarter of next year aggregate nicely, and a start has been made on the first half of year's business. The statement is made that present prospects are there will be warrant for operation of all furnaces that have been in operation and not unlikely for additional furnaces. Banking of two or three furnaces by the Tennessee Coal, Iron & Railroad Co. will be of but few days' duration, it is expected, the coal output by the corporation picking up rapidly. During this period it is expected there will be such repairing as necessary done about the furnaces.

At steel plants there is considerable steel on hand, and some cessation of operations is announced at Steel Corporation plants in this district. The plate mill of the big fabricating plant at Fairfield will be down this week. The Gulf States Steel Co. is shipping out its product as quickly as cars can be obtained, and there is a considerable pile of the product. The Birmingham Steel Corporation is completing shipment on structural steel shapes for a large fertilizer plant at La Grange, Ga., a record of speed being established in the work. The material was rolled from hot steel billets at the mills, cut and straightened, sorted and piled at the plant of the Tennessee Coal, Iron & Railroad Co. Then the material was hauled by trucks to the Birmingham Steel Corporation plant and unloaded, checked for size and weight, cut to proper length, punched, straightened, assembled, fitted, reamed, riveted, painted, inspected and loaded on cars, five days in all being consumed in this transformation.

Foundries and machine shops are still working on pretty near full time in this district, though fuel supplies are light. Reports of new business in sight are to be heard. The sugar machinery and cottonseed crushing machinery produced in this district this year has been extensive, the tonnage being very large.

Report from Mobile is to the effect that that city is prepared to make donation of a site for the big coal and ore storage plant the Government will build there. The storage will be able to handle 40,000 tons of coal and ore, and the intentions are to provide a plant that will handle coal from railroad cars to ships or to hold it until ships come in. Ore from South America, en route to the Birmingham district via the Warrior River, will also be handled through the storage plant. The Government expects to expend upwards of \$400,000 on the storage, but exacted the donation of a site.

The strike in coal mining sections of this district has reached the turning point, and the operators announce that not only is there a steady influx of new labor, but many of the old men are making application for work, and the production is increasing. A few of the older men in the industry are leaving the district, going elsewhere until the strike here has been abandoned or has been completely dissolved. Van A. Bitner, the chief representative of the national organization of the United Mine Workers of America, is very sanguine yet that he is going to be able to make

a strong impression, despite the presence of the military and holding down mass meetings and speeches which were tending towards inflaming the men. On the other hand, the operators report that the increasing production of coal indicates that the strike is on the wane, that there is no intention of ever giving in to recognition of the union and that the cause of open shop has a brighter prospect today than ever in this district, so far as the coal mining industry is concerned. The statement is made that 85 per cent of the coal being produced now in this district for domestic consumption, not going into the company's own plants, is being sold at a very fair margin of profit, and several of the companies here are holding the retail dealers to agreement that there must be no profiteering. The DeBardeleben Coal Co., in particular, has written to all dealers handling its coals, calling attention to contracts made in April, that the ultimate consumer was to get the coal at no higher price than coals of same quality were being sold, and some controversy has been started with two or three dealers that prices being obtained are not altogether fair, being too high. Inquiry throughout the country brought about no discriminating showing as to coal prices in Birmingham. Retail yards in Birmingham, almost within sight of coal mines, have been unable to meet demands for some time, and a sudden change in the weather brought about a demand for fuel that almost swamped the retail dealers and caused some comments. Car shortage for a long while interfered with a steady production, and then the strike came along and added to the troubles. Despite these difficulties blast furnaces in this district did not suffer as extensively as might have been expected. Foundries and machine shops have run on scanty fuel, and coke for a week or two was very close to the margin. As stated, the strike is on the wane, and while it will be felt more or less for some time yet, the production of coal will continue increasing right along.

The coke production in Alabama has improved some in the last two weeks and the belief is now that all requirements of the home territory will be met easily. While no mention is made of outside business, there is evidence of a little coke being shipped out. There is no discussion still as to the price at which coke is selling, and the old quotations are holding firmly, if not bettered, viz., furnace coke \$10 and foundry \$12.50 to \$15. By-product coke-oven plants are working to almost full capacities here except where repairs are being made. There is demand for all of the by-products.

A general deflection is noted this week in the scrap iron and steel markets, and with two or three exceptions there has been a change in the quotations of the various products under the heading of old material. Heavy melting steel is lagging, the larger consumers of the product withholding from the market and even asking delay in delivery of old contracts. The offer for heavy melting steel is down to \$20; a few weeks ago \$4 more than that was paid. The dealers in old material were not panicky, however, and believe that the quietness that has come over the market will be of short duration. The yards of the principal dealers are well supplied with stock. There is a report again that money is tight, which precludes any big buying of old material by the dealers for a while yet. One of the prominent scrap dealers in discussing the probabilities of the future expressed the opinion that immediately after the election there would be a change in the market conditions, and that it would not be long then when the former activity would be reached again. The pig-iron market lull has had no effect on the old-material market, say dealers, but just a natural sequence of a readjustment.

Quotations of pig-iron and iron and steel scrap in the Birmingham district are given as follows:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$42; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$43.25; iron of 2.75 to 3.25 per cent silicon, \$44.25 to \$45; iron of 3.25 to 3.75 per cent silicon, \$45.25 to \$46.50; iron of 3.75 to 4.25 per cent silicon, \$46.25 to \$48; charcoal iron, f. o. b. furnaces, \$55.

OLD MATERIAL.

Old steel axles.....	\$28.00	to	\$30.00
Old iron axles.....	27.50	to	30.00
Old steel rails.....	21.00	to	22.00
Heavy melting steel.....	21.00	to	21.00
No. 1 R. R. wrought.....	22.00	to	21.00
No. 1 cast.....	22.00	to	25.00
Stove plate.....	25.00	to	26.00
Old car wheels.....	28.00	to	30.00
Old tramcar wheels.....	28.00	to	30.00
Machine-shop turnings.....	11.00	to	12.00
Cast-iron borings.....	11.00	to	13.00

Industrial Conditions Good in West Virginia—Lumber Trade Dull—Labor in Demand.

Charleston, W. Va., October 2—[Special.]—A resume of conditions in West Virginia indicates no general diminution of business nor any slowing down of industrial activity except as to lumber and in construction projects of a private nature.

Within the last few weeks, however, there has been rather a sharp decline in the volume of lumber sales, and at this time the demand for lumber has almost reached the vanishing point, according to the statements made by lumber dealers. As there has been at the same time a rather sharp falling off of activities in the building trades, such a condition probably, in part, accounts for the slackened demand. Some lumber dealers describe conditions in their particular business fully as bad as they were in 1907.

However, neither in the lumber business nor in any other industry is there any evidence of unemployment, for while the demand for lumber is poor, mills are continuing to saw in preparation for a renewal of the demand. There is plenty of work for those who may be looking for it, though conditions are not such as to make it possible for the seeker to demand the kind of work he will perform.

There is perhaps as heavy a demand for coal miners as for any other class of labor, though common labor is in great demand, and there is also a call for woodsmen, lumber and mill men. It is impossible to satisfy the demand for farm hands, and most farmers are and have been forced to do their own work unaided except by members of their family.

Plants in most industries are working on a full-time basis. While coal mines are being operated to potential capacity, it is because of a car shortage, and that shortage is causing a loss in operating time of from 30 per cent to 40 per cent. Glass plants for the most part are still in idleness, but there is nothing alarming in that, since they are always closed down during hot weather.

There is little activity in building lines as disclosed in the small number of building permits being issued and in the lack of demand for carpenters, painters, plasterers and others in the building trades. Limited construction work is due to the unusually high price of materials and to the inability to secure such materials. It is almost impossible, for instance, to secure cement.

It is doubtful if there is as heavy a demand for skilled laborers as there was a few months ago, principally because of the dullness in the building line. However, unskilled labor is still very much in demand.

Big Mexican Demand for Building Materials.

San Antonio, Tex., October 4—[Special.]—According to J. S. Sur, petroleum geologist of San Antonio, who has been in Tampico and other parts of Mexico for the last several months investigating business and industrial conditions generally, the demand for cement, lumber, corrugated iron roofing and other building materials shows a big increase since peace was restored in that country. Manufacturing cement on a considerable scale will probably be started in Mexico in the near future. The large cement manufacturing plant at Tula, near the City of Mexico, will resume operations, and other plants in different parts of the country are to be placed in commission soon. Mr. Sur says in a letter:

"During my stay in Mexico I have learned that there was and is an extremely ready and willing market for Portland cement and corrugated iron roofing. Many building operations have been discontinued temporarily for lack of these materials.

"Lumber is in great demand at the port of Tampico at an exceedingly high price; casing of all sizes, especially the larger sizes, is in demand in that vicinity; wooden barges of from 5000 to 10,000 barrels capacity are being bought also by many interests in Tampico. Two river steamboats were being sought while I was there. There is much demand for skilled labor for drilling oil wells, and also for tank builders and carpenters who understand the construction of barges.

"Banking conditions have now been arranged there and credits have been established, so that business can be transacted satisfactorily."

Good Roads and Streets

Plans to Co-ordinate Transportation Agencies.

Akron, Ohio, Oct. 1—[Special.]—At a transportation conference held here in response to a call by the Federal Highway Council, committees were appointed to lay out and direct a movement to co-ordinate all existing transportation agencies, to the end that the public may have that form of common carrier service which is most efficient, economical and practical.

Highway officials from practically every section of the country were in attendance. The motor industry was well represented, and for the first time the railway—steam and electric—waterway and express companies took part in a good roads meeting, for such it was primarily.

One of the serious phases of road development, that of subgrade and its relation to the road surface, came before the conference, under the leadership of C. M. Upham, State highway engineer of Delaware and vice-chairman under Gen. Coleman Du Pont, chairman of the subgrade committee of the Federal Highway Council.

The work of this committee, it was pointed out, is in response to a demand that engineers find some way to overcome road failures which confront taxpayers at the present time, due to the attention which has been given to the surface construction at the expense of the foundation on which the surface rests. The committee will seek to determine definitely how sub-soils shall be treated in order to prevent damage to the costly road surface. In the hope of accomplishing this purpose, field tests will be made to determine the bearing power of various kinds of soil, studies will be conducted in drainage, and a study also will be made to ascertain by what chemical method the bearing value of the soil may be increased.

Among the engineers of note on this committee are A. T. Goldbeck, Bureau of Public Roads, Washington, D. C.; Prof. D. A. Abrams, chair of engineering, Lewis Institute, Chicago; Prof. F. H. Eno, chair of engineering, Ohio State University; D. S. Humphrey, Ohio State Highway Advisory Board; L. A. Nares, Fresno, Ca.; Col. H. W. Alden, representing the Society of Automotive Engineers; Paul D. Sargent, president American Association of State Highway Officials, and G. H. Shirley, former state highway engineer of Maryland and secretary of the Federal Highway Council; Prof. S. J. Tilden, chair of engineering, Yale University, and W. P. Blair of Cleveland, Ohio. Co-operating with the above group are leading executives in the motor industry. Their definite and express purpose is to open the way for the construction of roads that will meet not only present, but future traffic on the highway, and permit the motor truck to assume its inevitable position as a real factor in transportation.

The relation of the highways to railroads, waterways and other forms of transportation to the end that such carrier agencies may be properly co-ordinated in public service—this problem is in charge of a committee headed by W. J. L. Bamham of New York, member of the executive committee of the National Industrial Traffic League.

While supporting the movement to make a larger use of the public highway as a freight and express carrier, Col. Charles Hine of New York, an expert on motor terminals, challenged any member of the conference to show any such record in empire building as the American railroads had achieved in the past 90 years.

Throughout the entire session lasting two days, due credit and appreciation was given the railroads for the work performed; at the same time expressing a determination to make a larger and more extended use of the motor vehicle through the construction of more lasting types of road.

F. S. Holbrook, vice-president of the American Railway Express, pledged the co-operation of the interests which he represented, in the movement, to add the public highway to the nation's transportation system.

The Federal Government was represented by Dr. R. S. MacElwee, director of Foreign and Domestic Commerce, Washington, D. C., and Major J. M. Ritchie, motor transport division transportation service, Quartermaster's Corps, Washington, D. C.

Others of note attending were Prof. A. H. Blanchard, chair of highway engineering of the University of Michigan; Col. W. D. Uhler, state highway engineer of Pennsylvania, and W. F. Knowles of New Jersey State Agriculture College.

The fundamental manner in which Virginia has gone about the work of bringing her roads upto modern requirements occupied the attention of conference members on the second day. "Virginia's New Hour," a State photo-play made under the direction of the Council's Educational Bureau, and in which more than 2000 Virginians appear on the screen, was shown at one of the Akron theatres, followed by a short review of the Federal Highway Council's method of aiding State highway organizations in the conduct of State campaigns to provide sufficient capital for highway construction upon a large scale.

An educational committee under the chairmanship of W. E. Blodgett of Philadelphia was formed to co-operate with the educational bureau in furthering the efforts of the council in practical and intelligent highway development.

Industrial Progress at Okmulgee, Okla.

Okmulgee, Okla., October 2—[Special.]—What rapid strides Okmulgee is making in industrial development is shown by a survey of manufacturing here that has just been completed by the Okmulgee Chamber of Commerce. On the basis of the first six months of 1920, the survey indicates that the value of manufactured products turned out in Okmulgee factories and plants in the year 1920 will exceed in value \$31,000,000. This figure includes the casinghead gasoline plants throughout Okmulgee county, most of which are operated by Okmulgee companies and many of which are located near the city. Aside from the gasoline plants all of the manufacturing concerns included in the survey are located in the city proper with the exception of the Okmulgee Brick Plant, which is at Gaither, three miles east.

In making the survey the Chamber of Commerce mailed questionnaires to the officials of all the manufacturing plants in the city. These questionnaires were filled out and returned by most of the concerns under consideration, and in cases where they were not returned the information was secured in some other manner.

The survey shows that the oil-refining industry leads all other local industries in the amount of money invested in plants and in the value of the manufactured product. Casinghead gasoline comes next in importance, and glass, brick, steel and iron follow in the order named.

According to the survey, \$13,428,000 is invested in plant, machinery and permanent stock in the manufacturing plants of the city. Approximately 3000 men are employed in the plants, which number 82.

The value of art articles manufactured in Okmulgee for the year on the basis of operations for the first six months of 1920 is shown in the following table:

Material manufactured.	Value of Products.	Value of Plants.	Number of Employes.	Number of Plants.
Refined oil products.....	\$18,000,000	\$5,300,000	300	5
Casinghead gasoline.....	7,000,000	5,000,000	200	49
Window glass.....	1,750,000	650,000	725	2
Brick	1,000,000	600,000	125	1
Steel and iron.....	850,000	250,000	125	1
Sheet glass.....	400,000	125,000	75	1
Glass Bottles.....	200,000	100,000	50	1
Tools	470,000	250,000	37	2
Ice and electricity.....	450,000	800,000	100	2
Woodwork	470,000	150,000	25	3
Tanks	225,000	75,000	30	1
Ice cream.....	150,000	60,000	15	2
Bakery goods.....	100,000	40,000	40	7
Soft drinks.....	100,000	20,000	15	2
Candy	15,000	6,000	19	2
Cigars	7,500	2,000	5	1

\$250,000 Residence for Wheeling, W. Va.

Construction has begun on a \$250,000 residence for Henry G. Stifel of Wheeling, W. Va. It will be of Indiana limestone, with tile roof, having marble, tile and wood floors, indirect and steam vapor heat, electric elevators, light from central plant, hollow fire-proof tile, interior tile, safes and metal doors. The architect is Edward Bates Franzheim, and the contractors R. R. Kitchen & Co., both of Wheeling. The roofing contractors are Ludowici Celadon Company of Chicago, the heating plant is by Warren Webster & Co. of Philadelphia, and stone is furnished by Ingalls Stone Co., Bedford, Ind.

RAILROADS

Greater Efficiency on Railroads—Some Conspicuous Gains.

The Association of Railway Executives, 61 Broadway, New York, have gathered East, West and South reports showing what the railroads are doing toward obtaining more transportation service from their present facilities. None of the lines express satisfaction with what has been accomplished, although they have made advances, some of them conspicuous, and they consider the results as but a step toward greater ones. It is also noted by them that helpful co-operation is being given to the railroads by shippers and the general public, and in many cases the lines say that what they have accomplished toward heavier car loading and greater movement could not have been done without such co-operation.

It is then stated that in August of this year the railroads of the country moved more than 4000 carloads in excess of the record established in August, 1918, when the amount of freight handled by them was 7 per cent greater than had ever been handled before in that month. Furthermore, in July of the current year the average mileage per freight car for all railroads reporting increased to 25.7 miles per day, or 4.4 miles more than in July, 1919. That records would continue to be broken for a while was indicated by the fact that in the first week of September car requisitions in excess of the number of cars that the railroads could supply were a little more than in the middle of August.

The average daily freight-car movements on some of the railroads from which the aggregate figures were compiled are interesting because they display some remarkable improvements in efficiency. Thus, on the Baltimore & Ohio Railroad the movement increased from 24.3 miles in January last to 27.5 miles in July, and it is expected that the figures for September when compiled will show a daily average of 31 miles. The Illinois Central Railroad reports 42.2 miles average daily car movement in August, an increase of six miles over August, 1919, but this road's record of efficiency was made in June, 1917, when an average movement of 44.4 miles was established. The Central of Georgia Railway reports for August 30.1 miles, as compared with 19.4 miles in August last year, and the Chesapeake & Ohio Railway reports 37 miles for July, as compared with 27.8 miles in July, 1919. On the Pennsylvania Railroad it is reported that since July nearly two miles have been added to the average daily movement of freight cars and three miles as compared with the March to June figures. The New York Central lines report for July 26.8 miles, as compared with 25.9 miles for July of last year. The Atlantic Coast Line reports for August 24.5 miles per day, but notes that comparison with August, 1919, is not satisfactory, because there was a strike then and only 16.2 miles were obtained. The Florida East Coast Railway reports for June this year 46.7 miles daily car movement, but makes no comparison with last year. The Kansas City Southern Railroad made 41.5 miles daily car movement in August, as compared with 28.9 miles in August, 1919. On the Southern Pacific Railroad during May, June and July of this year the average daily freight-car movement was 36.6 miles, as compared with 34.1 miles for the same period of last year. The Chicago, Milwaukee & St. Paul Railway reports for August 32.7 miles daily car movement, as compared with 27.2 in the same month of 1919, and from September 1 to 12, this year, the figures were 35.08 miles, as against 31.2 miles for the whole month of September, 1919. The Southern Pacific lines in Texas and Louisiana report for July, 1920, a daily average car movement of 31 miles, as compared with 23.4 miles last year. On the Gulf, Colorado & Santa Fe Railway the daily car movement increased from 16.4 miles in March to 25 miles in August, the average for six months this year being 20.2 miles, as compared with 16.8 miles for the same period of last year.

\$3,000,000 Loan to the B. & O.

A Government loan of \$3,000,000 to the Baltimore & Ohio Railroad to aid in making additions and betterments to right of way and for the construction of buildings to facilitate freight movement has been approved by the Interstate Commerce Commission.

Proposed Electric Railway Over the Blue Ridge.

W. T. Shipp, general manager of the Blue Ridge Development Co., Newton, N. C., has made another report to the stockholders concerning the preliminary work for the construction of the proposed Charlotte, Hickory & Blowing Rock Electric Railroad. He says that a survey has been made from Mt. Holly to Blowing Rock, N. C., 105 1/4 miles, and that the engineers have succeeded in getting a maximum grade of 3 1/2 per cent over the Blue Ridge at an altitude of about 4000 feet, the line up the mountain being "extremely satisfactory," he says, "with standard degree curves, such that a steam, gasoline or electric train can run over."

The line surveyed is from Mt. Holly via Mountain Island, Lucie, Lowesville, Triangle, Denver, Terrell, Monbo, Long Island, Gold Mine, Bandy's Cross-Roads, Balls Creek Camp Ground, Newton, Conover, Hickory, Granite Falls, Hudson, Lenoir, Patterson, Mills, Yadkin Woolen Mills, and thence along the Yadkin River "up through rich lands" to Blowing Rock. By this route the line will cross but one small stream after leaving Mt. Holly until it crosses the Catawba River, three miles north of Hickory, at a point known as Thornton Shoals, 60 miles from the beginning. From this place to Blowing Rock few streams are crossed, all of them being small.

Estimates of the probable cost of construction and equipment are now being made by the chief engineer, and the maps, blue-prints, etc., are being finished. Mr. Shipp is closing up the rest of the right of way contracts.

New Equipment and Improvements.

Mobile, Ala., September 30—[Special.]—Announcement is made by President Isaac B. Tigrett of the Gulf, Mobile & Northern Railroad Co., that \$500,000 will be spent for new equipment consisting of locomotives, freight and flat cars. New ballast on certain parts of the road-bed will also be applied.

"We are making these improvements in anticipation of heavily increased business," commented President Tigrett. "The road has completed its settlement with the Government, and I believe we are one of the first roads in the country to attend to this detail following the return of the lines to owners."

Further announcement was made of the retirement of E. D. Hogan, vice-president and general manager of the Gulf, Mobile & Northern, on account of ill-health. His successor has not been named.

Large Gross Earnings Reported.

The Baltimore & Ohio Railroad Co. has reported to the Interstate Commerce Commission that its total operating revenue for August was \$20,222,080, an increase of \$2,400,613 as compared with the same month of last year, while for the eight months ended August 31 the total operating revenue was \$139,081,224, an increase of \$25,179,339 as compared with the same period of last year. A continuance of these gains would send the total operating revenues for the current calendar year well above \$200,000,000, but it is estimated that they may go as high as \$240,000,000, for the system is said to be regaining rapidly its merchandise traffic which was diverted during the war by the Railroad Administration so as to permit the Baltimore & Ohio to be used largely for handling products and raw materials required for conducting military operations.

Extensive Improvements at Radford, Va.

The Norfolk & Western Railway, according to a report from Roanoke, Va., where the company's headquarters are situated, says that more than \$1,000,000 will be spent at Radford, Va., for improvements and additional facilities, and that Radford, which is 45 miles west of Roanoke, will be made a division terminal. It is understood that the plans contemplate the erection of a large roundhouse, machine shops, a new station and extensive additions to the tracks. There will also be spent \$500,000 for the creosoting plant at Radford.

\$7,300,000 for Railroad Improvements.

On the Southern Pacific lines in Texas and Louisiana it is reported \$2,800,000 will be expended for new rails, \$3,800,000 for ballasting and \$700,000 for bridges, all of this having been authorized.

Southern Pacific Preparing to Use Lignite for Fuel.

Experiments with the use of lignite for fuel on locomotives of the Southern Pacific lines have shown that this substance can be successfully used instead of coal, according to a report from San Francisco quoting Julius Kruttschnitt, chairman of the board. It is stated that lignite can be efficiently employed when it is blown into the locomotive firebox above the flame in much the same manner as oil is now used. The company has had 100 engines fitted for the burning of lignite, but its regular use in them has not yet begun. It is noted that there are great deposits of lignite in California.

Railroad Notes.

The appointment of Louis V. Bean to be chief engineer of the Georgia, Florida & Alabama Railroad is announced in a report from Savannah. His office will be at Bainbridge, Ga.

The United States Mortgage & Trust Co. of New York has been appointed trustee for the first mortgage of the Gulf, Mobile & Northern Railroad Co., which will secure \$15,000,000 of bonds.

H. C. Williams, chief engineer of construction, Louisville & Nashville Railroad, has, according to a report, from Louisville, Ky., resigned to become president and general manager of the Campbell Coal Companies at Knoxville, Tenn.

The Pearl River Valley Railroad has applied to the Interstate Commerce Commission for authority to issue \$150,000 of notes and the Wheeling & Lake Erie Railway has asked the commission for a loan of \$2,460,000.

The Interstate Commerce Commission has approved a loan of \$2,000,000 to the Virginian Railway Co. to enable it to fulfill its plans for increasing facilities for handling its steadily enlarging traffic, which is mainly coal. The Western Maryland Railway Co.'s loan of \$1,372,800, to enable it to carry out its improvement plans lately announced, was also approved.

New Equipment.

Illinois Central Railroad has ordered 25 switching locomotives from the Baldwin Works.

Norfolk & Western Railroad will build eight Mallet locomotives at its own shops, Roanoke, Va.

Gulf, Mobile & Northern Railroad has ordered four new locomotives to cost \$200,000.

Weller Construction Co., Washington, D. C., has ordered one four-wheeled locomotive from the Bell Locomotive Works.

Baltimore & Ohio Railroad has placed its order for 50 locomotives of the Mikado type from the Baldwin Works in Philadelphia.

Western Maryland Railway has increased its order for locomotives from the Baldwin Locomotive Works from 20 to 40 engines, consolidation type.

St. Louis Southwestern Railway has ordered 10 consolidation locomotives from the Baldwin Works, this making 20 engines ordered by this company.

Textile Mill Notes.

An increase of capital from \$100,000 to \$500,000 has been announced for the Linden Manufacturing Co., Davidson, N. C.

An increase of capital from \$135,000 to \$270,000 has been announced for the Guadalupe Valley Cotton Mills, Cuero, Tex.

W. K. Whipple, O. P. Harlan and associates of Stamford, Tex., will incorporate a \$1,000,000 company to build a 10,000-spindle cotton mill.

The American Cellulose & Chemical Manufacturing Co., Ltd., New York, will build an artificial silk mill with 7000 square yards of floor space.

The Philippi (W. Va.) Blanket Mills will build a one-story 45 by 25 foot addition of hydraulic steel, the contract having been awarded to the Hydraulic Steelcraft Co. of Cleveland, Ohio.

TEXTILE

SOUTHERN COTTON MILL PROGRESS.

Nearly \$3,000,000 for 42,544 Spindles and \$112,200 for 374 Looms During Third Quarter.

Approximately \$3,112,200 will be the cost of the new and enlarging Southern cotton mills announced from July 1 to October 1. This amount includes the investment for providing the buildings, mechanical equipment, textile machinery, engineering, electric light and power installations, operatives dwellings, water works, sewer systems and other necessities. The estimate is obtained from data which the MANUFACTURERS RECORD received during the third quarter of the year.

Plans for the months of July, August and September call for installing 42,544 spindles estimated to cost nearly \$3,000,000, and 374 looms estimated to cost \$112,200, a total of \$3,112,200 for both the spinning and weaving mills of the third quarter of 1929.

Many of the new organizations formed during the past 18 months are now busily engaged in building their plants and the enlarging mills are building their additions.

Name.	Location.	Spindles.	Looms.
Rossland Cotton Mills Co.	Charlotte	4,544	..
Love Cotton Mills Co.	Lincolnton	7,000	..
Melville Mills	Lincolnton	6,000	..
		17,544	

South Carolina.	
Cherokee Weaving Mills	Gaffney
Mojoto Manufacturing Co.	Laurens
	74

Tennessee.	
Brookside Mills	Knoxville
	300

Texas.	
Texas Cotton Mills Co.	Fort Worth
Continental Tire & Fabric Co.	Stamford
	15,000
	25,000

Total for first quarter of 1929	497,799	17,294
Total for second quarter of 1929	140,820	1,108
Total for third quarter of 1929	42,544	374
Total for nine months of 1929	681,163	18,776

B. B. & R. Knight Corporation Chartered.

With an authorized capital of \$100,000,000 and 1,000,000 shares of no par value stock, the B. B. & R. Knight Corporation has been chartered to own and operate the B. B. & R. Knight cotton mills, purchased recently by Frederick R. Rupprecht of New York. These properties comprise 17 mills in Rhode Island and Massachusetts with an equipment of 533,457 spindles and 13,310 looms, driven by 26,000 horse-power, 30 per cent of this being water-power. The various buildings of these mills have a total floor space of 3,000,000 square feet, including a bleachery with annual capacity of 50,000,000 yards of cotton cloth, 5500 operatives being employed. For many years the Knight properties have been known as the largest cotton manufacturing enterprise in this country and probably in the world.

Mr. Rupprecht is president of the Consolidated Textile Corporation, Converse & Co., Kelsey Textile Corporation and the Defender Manufacturing Co., the first-named having purchased several Southern cotton mills during the year. The Knight mills had their inception in 1848, when Robert Knight began the manufacture of cotton cloth, and the product now includes fine sheeting, shirtings, twills, cambric and high-grade yarns, the "Fruit of the Loom" having been a Knight specialty for many years.

Will Change Brewery to Cotton Mill.

Plans have been prepared and machinery purchased for changing the Lone Star Brewery at San Antonio to a cotton mill, in accordance with a recent announcement. The brewery owners have organized the Lone Star Cotton Mills with \$1,300,000 capital and H. Bruhn as president to operate the cotton mill. The main building is a 250x70-foot brick structure, and it will be equipped with 10,000 spindles and 300 looms driven by electric power for a daily capacity of 15,000 yards of chambrays. The mill machinery will cost \$300,000, and all contracts have been awarded through Gregg & Co., engineers and architects, Newark, N. J., and San Antonio.

Commendations, Kicks and Comments

Cover Page Editorials.

S. S. BUDLONG, manager General Engineering & Construction Co., Rockford, Ill.—We like the stand you take on various matters, and we especially enjoy your front-cover editorials and consider them well worth the subscription price by themselves alone.

A Reader for 35 Years.

JAMES A. LOUNSBURY, Clemont, Va.—I have been a reader of your paper for 35 years, until I retired from active business two years ago, but I find that I miss it continually and shall be glad to subscribe for it again.

Advertising Their Own City.

J. CECIL NUCKOIS, manager advertising department, The Otis Hidden Company, Louisville.—On page 95, your issue September 9, we note an article in reference to the Florida idea for State advertising.

It might interest you to know that for a period of nine years The Otis Hidden Company has made the regular habit of advertising our city, and during the past few months we have devoted a page of our monthly catalog to same.

We cannot help but believe that it was the better part of wisdom for us to boost our own town, for in so doing we are helping ourselves as well as the other fellow.

Pikes Peak or Bust.

R. A. SINDALL, A. K. Robins & Co., Baltimore, Md.—We have read with interest your editorial on September 20, entitled "Pikes Peak or Bust."

Your reply to Mr. Hopkins is well worth reading, particularly the explanation of the origin of the expression, "Pikes Peak or Bust."

Surely there are two sides to every story, and why any one would be unwilling to hear both sides of the present political "war" is something that we cannot understand.

Your reply to Mr. Hopkins is interesting and to the point, and the writer is glad to join the ranks of the thousands of Democrats who will unquestionably cast their votes for Mr. Harding next November.

Thinks the Editor of the Manufacturers Record Is Headed Down to Ruin, But, if So, Many Millions of America's Foremost People Are Going the Same Way.

THOS. A. JORDAN, Shreveport, La.—I subscribed to the MANUFACTURERS RECORD, believing it to be devoted to the upbuilding of a large portion of the nation that now needs it most and promises the greatest return, but the MANUFACTURERS RECORD has not measured up to that high calling. It impresses me as being actuated and directed by the narrowest prejudices whose sole intention is to fight the Democratic Administration. I think this Administration has been just as good as you have stressed it as being bad.

I regard its editor now as tottering on down to the class of Mahone, Wise and others of my boyhood days in Virginia.

I regret being unable to find sound, unprejudiced, patriotic influence in the MANUFACTURERS RECORD of today, and will, therefore, not renew.

Sam Randall Type of Democrats Needed in South.

M. E. MILLER, secretary Highland Citrus Sub-Exchange of Florida Citrus Exchange, Leesburg, Fla.—In addition to enclosed check renewing my subscription, I wish to add that if the sound, patriotic, pulsing and red-blooded Americanism that appears regularly in the columns of the MANUFACTURERS RECORD, and especially in the issue of September 16, could be put into the hands of every voter in the country, there would soon remain little doubt in the public mind as to who would occupy the White House chair the next four years. If the late election in Georgia is a criterion to go by, there is in store soon a great awakening for those who place party allegiance above that of principle and loyalty to country. If Dean Stanley was right when he said, "You may, by establishing a single truth, put to flight a hundred heresies," how grateful should our loved South be to those patriotic souls who are laboring faithfully, in spite of benighted opposition, to repudiate the utter fallacy that free trade is a friend of the South! Would that we had enough Sam Randall Democrats to stamp out such heresy. How much longer will the deluded South take deceptive advice from the money-lenders and wholesale importers of our business centers, who have fattened enormously at our expense? May the South wake up soon enough to shake off this free-trade delusion before our producers are forced to do so through impoverishment.

It would seem that the time has come in the history of our country when no one will vote for a man, if he happens to be a "yellow dog" or a "wet dog," either, simply because he happens to be the party nominee.

Long may the MANUFACTURERS RECORD live to lead in the great service it is now rendering to our country!

The Foundations of Industry.

WILLIAM H. FISHER, Model Mill Co., Charlotte, N. C.—Replying to the attached, will advise that I am engaged in the flour business—selling flour to the wholesale trade in this State and Virginia. I have for a long time been a reader of your publication, which treats and deals with facts which directly effect every industry from the very foundation, and the fearless and logical manner in which you treat these subjects is to be commended most highly. I wish you a continued and long-growing success.

Why He Subscribes.

E. G. COOK, president The Panhandle Short Line Railway Co., Wichita Falls, Tex.—An old man, not a relative of mine but a roomer at my home, subscribed for the MANUFACTURERS RECORD. He is 84 years old, and he ordered it sent in my name so as to have it delivered at my home. It is laughable that the "Harding tendencies" of the paper do not happen to agree with the views of the man who sent in the subscription, but do fully agree with my views on the Presidential race—so the old Democrat subscriber turned the paper over to me, and I find the enclosed slip that has just come to my notice, therefore am enclosing check for the full year, \$6.50.

FOREIGN NEEDS

[The MANUFACTURERS RECORD receives many letters from abroad asking for information about American goods, and others, from men who wish to represent American houses. Without assuming any responsibility for these concerns, we publish a summary of the foreign letters of inquiry from week to week.]

Typewriters—Hardware.

AMOR HERMANOS & Co., Pontevedra, Espana.—We are interested in typewriting machines, as well as all supplies and accessories pertaining to the typewriting pursuit, and will be more than willing to represent any good make in this country. We are also interested in the importation of fencing, galvanized wire, kitchen utensils and in everything connected with the hardware business.

American Trade Opportunities in India.

TECKCHAND GANGARAM & Co., 33-34 Gordhanas Market, Karachi, India.—There is a great future in store for the American merchandise in this market. And in our opinion, only the lack of proper experience by the Americans of the German and British business methods of exportation and the financing thereof stands in the way of such a development. All British merchant shippers or manufacturing exporters will quote c. i. f. prices and allow 30 to 90 days' credit, whereas American merchants generally quote f. o. b. prices, with cash against documents, or against confirmed banker's letter of credit.

Another factor that generally handicaps the importing houses on this side is your quotation in dollars. Indian merchants can easily understand the English exchange and money problems, having been used to them since ever so long. But the dollar exchange is quite new to them, and it cannot be easily acclimatized here. If the Germans can quote for their goods in sterling, there is absolutely no reason why the Americans could not do the same thing.

Lastly, it is generally understood here that the Americans are used to a high percentage of profit on their dealings. In order to compete with the English in the textile trade (which accounts by far the major portion of the British exports) your merchants must keep the lowest possible margin of profit at the start. We believe that American commerce with India will continue to grow year by year, owing to the great popularity of the American products in this country, but manufacturers and shippers on your side will do well to follow on the lines outlined above, as it will greatly tend to induce fruitful and cordial relations between the merchants of both the countries.

Regarding the products in which we are interested, and for which we will welcome representation for our territory, from reliable American manufacturers we may mention: Textile, cotton, wool and silk, seal plush cloth and woolen rugs and blankets; hosiery and underwear (vests and undershirts), plain, meshed or knitted, not union suits; imitation rolled gold jewelry and pearls; sundries and various other articles.

We export Indian, Arabian, Persian and Khorasan carpets; Indian curios, brassware, hand-carved woodenware and furniture; Indian silks, lace embroidery and chikanwork, gold and silver tissue scarves, ivory figures, imitation and gold jewelry, and various other manufactures and handicrafts of India too numerous to mention here.

We invite correspondence from American importers and exporters of good standing, with a view to the mutual exchange of opinions on trade possibilities, and we shall feel obliged if you can help us in this regard.

For any information regarding ourselves, we refer you to: Messrs. Cox & Co., 38 Lombard street, London; Chartered Bank of India, Australia and China, at London and New York.

Construction Department

EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Airplane Plants, Stations, Etc.

Md., Baltimore—Airplanes.—Ericson Marine & Air Craft, Ltd., F. G. Ericson, Prest., Toronto, Canada; establish plant; mfrs. airplanes and power boats.

Md., Baltimore—Airplanes.—Aeromarine West Indies Airways, 111 N. Charles St., inceptd.; capital \$750,000; Paul B. Barringer, Jr., George B. Brooks, Murray Taylor; airline transportation between Cuba and United States.

Bridges, Culverts and Viaducts.

Ark., Elkins.—Washington County Comms., Fayetteville, Ark.; build three bridges; \$36,000; rejected bids; will invite new bids; Ozark Engineering Co., Engr., Springdale, Ark. (Lately noted)

Ky., Harlan.—Harlan County Comms.; build concrete substructure and steel superstructure highway bridge over Martins Fork of Cumberland River at Catrons Creek; length 162 ft.; 16-ft. roadway; 545-ft. concrete substructure and steel superstructure highway bridge over Cumberland River at Wallins Creek; bids until Oct. 11; Nelson Cory, Engr. (See Machinery Wanted—Bridge Construction.)

Tex., El Paso.—City of El Paso, Charles Davis, Mayor, and City of Juarez, Mexico, Antonio Corona, Mayor; build free toll bridge connecting cities; concrete span; \$300,000 contemplated.

Md., Leonardtown.—State Roads Coms., 601 Garrett Bldg., Baltimore; build timber bridge on timber piles over St. George Creek between St. George's Island and Piney Point, St. Mary's County; bids until Oct. 12. (See Machinery Wanted—Bridge Construction.)

Miss., Holly Springs.—Marshall County Supvrs.; build wood and steel bridges; concrete culverts; \$4.68 mi. graded highway; \$26,000 available; bids until Oct. 16; H. C. Dietzler, State Highway Engr., Jackson, Miss. (See Machinery Wanted—Bridge Construction.)

S. C., Anderson.—Anderson County Highway Coms.; build concrete arch bridge; Robertson, Estes & Martin, Contrs., Union, S. C.

Tex., Fort Worth.—Tarrant County Comms., Y. E. Yancy, Auditor; build reinforced concrete bridge over Little Bear Creek; \$8,311.01; bridge over Big Fossil Creek; \$20,951.72; Echols Bros., Contrs. (Lately noted inviting bids.)

Va., Portsmouth.—Norfolk County Comms., Roads and Bridges; rebuild Western bridge; 1900 ft. long; construction by county. (Lately noted inviting bids.)

W. Va., Spanishburg.—Mercer County Commissioners, Princeton, W. Va.; build 40-ft. span, concrete girder bridge across Rock Creek; \$1076.50; Frazier & Hoger, Contrs., Hamlin, W. Va.; Elmer C. Barton, Engr., Princeton, Va. (Lately noted inviting bids.)

Canning and Packing Plants.

Fla., Fort Lauderdale.—A. W. Belfry, Detroit, Mich.; leased building; establish plant to mfrs. jellies and marmalade from citrus fruits.

Fla., Lakeland.—Polk County Packing Co. inceptd.; capital \$30,000; E. B. Stuart, Prest., Atlanta, Ga.; M. H. Dorsett, Secy.-Treas., Lakeland.

Fla., Lake Worth.—Tropical Fruit Conserving Co. inceptd.; capital \$50,000; D. P. Council, Prest.; R. L. Horsman, Secy.-Treas.

Ga., Dublin.—Georgia Canning & Packing Co.; increase capital to \$25,000; establish cannery for sweet potatoes; daily capacity 500 bu.; erect storage warehouse.

Ga., Lyerly.—C. A. Lyerly, Chattanooga, Tenn.; contemplates establishing cannery for vegetables.

Ga., Savannah.—Southern States Packing Co., B. F. Williamson, V.-P.; establish meat-packing plant; also compound factory for cooking oil, soap, etc.; total cost, with site, \$1,000,000; Brooks Engineering Co., Engr., Moultrie, Ga. (Lately noted establish plant.)

Md., Baltimore.—Smith-Eynon-Armstrong Laboratories & Sales Co.; increase capital to \$50,000.

Clayworking Plants.

Ky., Ashland—Fire Brick.—Ashland Fire Brick Co.; increase capital from \$400,000 to \$1,000,000.

Ky., Madisonville—Tiles.—Madisonville Drain Tile Co., J. D. Bobbitt, Secy.-Treas.-Mgr.; enlarge drying capacity; construct fireproof building; construction by owner; install dryer cars and mchys.; daily output 65 tons hollow or building tiles. (See Machinery Wanted—Motor.)

S. C., Columbia—Shale Products.—Richland Shale Products Co.; increase capital from \$75,000 to \$100,000.

S. C., Society Hill—Clay Products.—Howard H. Stafford Clay Products Co., Augusta, Ga.; acquired plant; daily capacity 100,000 bricks and 150 tons tile; contemplates improvements.

Coal Mines and Coke Ovens.

Ky., Allcock.—Carrs Fork Coal Co., J. B. Allen, Mgr. and Constr. Engr.; develop 2400 acres; present daily output 200 tons; later increase to 2500 tons; install \$50,000 electrical mchys.; purchased. (Lately noted increased capital to \$300,000.)

Ky., Barbourville.—Ennis Coal Co. inceptd.; capital \$150,000; E. N. Ennis, J. A. McDermott, W. H. Avant.

Ky., Blackey.—Elk Creek Coal Co., main office, Knoxville, Tenn.; develop 1200 acres coal land; daily output 1000 tons; install

electric-power equipment; L. J. Madden, Const. Engr. and Mgr., Blackey.

Ky., Cornettsville.—East Kentucky Coal Co.; develop additional mines; construct tipple and miners' houses; increase daily capacity to 500 tons.

Ky., Harlan County.—Vinson-Harlan Coal Co. inceptd.; capital \$100,000; Conrad Kohl, Guy Vinson; both Louisville, Ky.; R. E. Bowen, Harlan, Ky.

Ky., Harold.—Hamilton-Elkhorn Coal Co. inceptd.; capital \$3000; Emmett Hamilton, Jr., J. O. Flannery; both Harold; John N. Hamilton, Prestonburg, Ky.

Ky., Henderson.—Pennyrile Coal & Mining Co. inceptd.; capital \$10,000; X. R. and G. M. Royster, S. K. Sneed.

Ky., Hazard.—Scuddy Coal Co. inceptd.; capital \$150,000; C. G. Bowman, W. J. Brown, Jr., J. A. Roan.

Ky., Ice.—Cumberland-Hazard Coal Co. care of Wilson Franklin; construct coal chute, bins and power plant.

Ky., Idamay.—Abston Coal Co. inceptd.; capital \$2000; M. V. Abston, Idamay; G. B. Bennett, Endee, Ky.; Hiram Begley, Peabody, Ky.

Ky., Jenkins.—Dunlap-Looney Coal Co. inceptd.; capital \$10,000; S. E. and Martha Looney, K. B. Dunlap.

Ky., Louisa.—Millers Creek Kentucky Mining Co. inceptd.; capital \$20,000; T. B. Lane, M. F. and N. B. Conley.

Ky., Mayking.—Mayking Coal Corp., D. C. Bomer, Mgr.; develop 500 acres coal land; daily output 400 tons; install mchys.; will let contract for 400-ton storage bin. (See Machinery Wanted—Mining Machinery.)

Ky., McDowell.—Liberty Coal Corp., Chas. Enzian, Prest.-Mgr., Pikeville, Ky.; develop 436 acres coal land; daily output 206 tons; install mchys.; C. G. Evans, Const. Engr., Pikeville, Ky. Lately noted increased capital to \$300,000. (See Machinery Wanted—Drills; Cars; Shovels; Rails; Lumber; Mining Machines; Carbide; Building Material; Food Products; Fans.)

Ky., Morganfield.—Farmers' Coal Co. inceptd.; capital \$2000; A. G. Mason, T. E. Markham, R. E. Sheffer.

Ky., Mt. Sterling.—Premium Cannel Coal Co. inceptd.; capital \$50,000; Lewis, E. W. and M. W. Apperson.

Ky., Perry County.—New York Smokeless Coal Co., New York; leased extensive coal lands; develop.

Ky., Pikeville.—Wade Coal Co. inceptd.; capital \$25,000; W. J. Pilsen, Pikeville; W. P. Varney, Williamson, W. Va.; Monroe Goosling, Canad, Ky.

Ky., Pineville.—Banner Straight Creek Coal Co. organized; B. E. Gianini, Prest.; J. E. Settle, V.-P. and Mgr. and Constr. Engr.; develop 250 acres. (Lately noted inceptd., capital \$25,000.)

Ky., Somerset.—Dixie Block Coal Co. inceptd.; capital \$150; Ward Gaulker, H. D. Paisley, Tom Hughes.

Ky., Viper.—Baker Coal Co., F. H. Baker, Mgr.; develop 980 acres coal land; daily output 150 tons. (Lately noted to develop additional mines.)

Ky., Wayland.—Glogora Coal Co., Huntington, W. Va.; develop 5400 acres coal land at Wayland and Monteal, W. Va.; install mchry.; C. H. Beidenmiller, Const. Engr.; build steel tipple; Pittsburgh Coal Washer Co., Contr., Fulton Bldg., Pittsburgh, Pa. (See Machinery Wanted—Mining Machinery.)

Ky., Whitaker, P. O. Seco.—Logan Elkhorn Coal Corp.; erect additional tipple.

Okla., Morris (R. Routs).—Shamrock Coal Co. inceptd.; J. W. Hinton, Jno. Johnson, T. Flannigan; all Henryetta, Okla.; develop 320 acres coal land; later to install electric mchry. (J. W. Hinton lately noted under Gaither as leasing coal land.)

Tenn., Chattanooga.—Chattanooga Iron & Coal Corp.; increased capital from \$2,500,000 to \$4,500,000.

Tenn., Knoxville.—Wilden's Fork Coal Co. inceptd.; J. W. Henderson, Prest.; John A. Rose, Secy-Treas.

Va., Wise.—Rex Coal Corp. chartered; capital \$25,000; Creed F. Anderson, Prest., Norton, Va.; H. J. Kiser, Secy., Wise, Va.

W. Va., Belington, Box 2.—Ferndell Coal Co. organized; Samuel B. Brooks, Prest.-Mgr.; Henry O. Ross, V.-P.; Ray Pepper, Secy-Treas.; all Fairmont, W. Va.; Box 57; develop 77 acres coal land; install mchry.; daily output 250 tons; W. L. Marple, Const. Engr., Grafton, W. Va. Lately noted inceptd., capital \$25,000. (See Machinery Wanted—Mining Machinery.)

W. Va., Bluefield.—Essie M. Thorn; develop coal land.

W. Va., Charleston.—Grosvenor Coal Sale Co. inceptd.; capital \$25,000; H. C. Jones, A. P. Kilburn, J. G. Pettet.

W. Va., Corinth.—Clermont Coal Mining Co. inceptd.; capital \$250,000; Abram L. and Oscar K. Light; both Punxsutawney, Pa.; Robert P. Malone, Thomas, W. Va.

W. Va., Howesville.—Craig Coal Mining Co. organized; W. E. Arnett, Prest.; C. W. Craig, V.-P. and Mgr.; E. F. Hall, Secy.; H. G. Hodges, Treas.; all Kingwood, W. Va.; develop 200 acres coal land; has equipment; daily output 3 cars. (Lately noted inceptd., capital \$200,000.)

W. Va., Huntington.—Lick Ford Collieries Co. inceptd.; capital \$50,000; F. J. Payne, S. J. Hyman, N. J. Pugh.

W. Va., Huntington.—Mountain State Coal Corp., R. B. Campbell, Secy-Treas.; develop 250 acres coal land; daily output 1500 tons. (Lately noted organized, capital \$50,000.)

W. Va., Hubbard.—Schell Coal Co. inceptd.; Elmer Whitacre, Thomas Wilhelm; both Hubbard; J. F. Somerville, Cumberland, Md.

W. Va., Kingwood.—Mary Coal Co. inceptd.; capital \$100,000; J. L. Marst, E. Costelow; both Kingwood; Howard Cross, Cumberland, Md.

W. Va., Kingwood.—Roaring Creek Collieries Co. inceptd.; capital \$50,000; S. P. Mitchell, Kingwood; Everhart Bierer, Morgantown, W. Va.; J. Mark Feather, Albright, W. Va.

W. Va., Logan County.—Tompkins By-Product Coal Co. inceptd.; capital \$100,000; W. E. Tompkins, C. R. Conner, C. C. Rand, all Huntington, W. Va.

W. Va., Lumberport.—H. N. Hough Coal Co. (lately noted inceptd., capital \$50,000) organized; V. L. Horner, Prest-Treas.; J. H. Horner, V.-P.; E. M. Robinson, Secy.; H. N. Hough, Gen. Mgr.; develop 20 acres coal land; daily output 400 tons. (See Machinery Wanted—Conveying Equipment.)

W. Va., Morgantown.—Morgantown Consolidated Coal Assn. inceptd.; capital \$10,000; John L. Dougan, Guy A. Hall, Luther S. Morris.

W. Va., Morgantown.—Connellsville By-Product Coal Co. organized; capital \$5,000,000; Jas. A. Paisley, Prest., Cleveland, O.; John McCourtney Kennedy, Secy.; Stephen Arkwright, Mgr.; both Morgantown; develop 1300 acres; daily output 8000 tons; install electrical mining mchry. (See Machinery Wanted—Mining Machinery.)

W. Va., Nicholas County.—Comfort Coal Co. inceptd.; capital \$50,000; Chas. G. Davis, Duke Hill, C. E. O'Neill; all Charleston, W. Va.

W. Va., Preston County.—Lancaster Coal & Coke Co. inceptd.; capital \$25,000; Edward A. Robson, Houston Run, Pa.; Jesse L. Lancaster, Joseph H. Johnson; both Charleroi, Pa.

W. Va., Raleigh County.—Tommies Creek Land Co. inceptd.; capital \$110,000; C. V. Cottle, Beckley, W. Va.; William B. Crawford, P. T. Lilly; both Bluefield, W. Va.

W. Va., Raleigh County.—Beckley Pocahontas Coal Co. inceptd.; capital \$1,000,000; A. J. King, Harry S. Irons, S. S. McNeer; all Huntington.

W. Va., Reedsville.—Triad Coal Co. inceptd.; capital \$25,000; T. J. Barnard, W. R. Michener; both Reedsville; W. M. Bennett, Waynesburg, Pa.

W. Va., Sand Creek.—Eden Park Coal Co. inceptd.; capital \$10,000; Shelby and John D. Shelton; both Sand Creek; D. P. Crockett, Big Creek, W. Va.

W. Va., Summersville.—Nicholas Producing Co. inceptd.; capital \$99,000; C. H. Craig, C. E. Rudisill, R. E. Timbers; all Charleston, W. Va.

W. Va., Upshur County.—Sudiahi Coal Co. inceptd.; capital \$25,000; F. S. Suddath, Grafton; J. Ray Smoot, Newburg, W. Va.; J. C. Federer, Morgantown, W. Va.

W. Va., Weirton.—Weirton Coal Co. inceptd.; capital \$25,000; John E. and Anthony Cutone; both Weirton; R. B. Jester, New Cumberland, W. Va.

W. Va., Wheeling.—Rex Coal Co. inceptd.; capital \$50,000; R. A. Greer, Wheeling; Edward Johns, E. G. Voltz; both Bridgeport, W. Va.

W. Va., Williamson.—Pearl Coal Co. inceptd.; capital \$100,000; Thomas Hatfield, William Ball, both Williamson; Pearl Bassham, Stone, Kentucky.

W. Va., Williamson.—Alcone Coal Co. incorporated; capital \$4000; R. L. Copley, Andy New, Jasper Allen.

W. Va., Wilsonberg.—Fort Pitt Coal Co., Clarksburg, W. Va.; acquired 43,388 acres coal land; develop; output for first year 39,000 tons; later increase to 43,328 tons.

W. Va., Woodville.—Pure Coal Co., I. G. Williams, Secy., 108½ Capital St., Charleston, W. Va.; leased 540 acres coal land; develop; daily output 500 tons; install equipment including 2 electric motors and 2 cutting machines. Lately noted organized; capital \$100,000. (See Machinery Wanted—Motors.)

Concrete and Cement Plants.

Fla., Pensacola—Cement Products.—Southern Petrinite Co., main office De Funik Springs, Fla.; establish plant; operates plants in West Florida and South Alabama.

Md., Baltimore—Concrete Molds.—Super-Concrete Mold Co., 1601 Lexington Bldg., inceptd.; capital \$10,000; John W. Smith, Wm. D. Ham.

Okl., Dougherty—Asphalt.—Continental Asphalt & Refining Co.; erect refinery; reinforced concrete and steel; reinforced concrete flooring; concrete foundation; construction by day labor.

Cotton Compresses and Gins.

Ala., Birmingham.—Birmingham Compress Corp. chartered; capital \$50,000; Jno. W. Wade, Prest.; A. L. Fort, Secy-Treas.

Ark., Tinsman.—W. S. Nutt; construct 6x24x20-ft. ginnery; install three 60-saw gin plants, complete. Lately noted rebuild burned ginnery. (See Machinery Wanted—Engines; Boilers; Pumps.)

Miss., Belzoni.—People's Compress Co.; increase capital from \$50,000 to \$100,000.

N. C., Wadesboro.—E. A. and W. W. Morgan; rebuild burned ginnery; loss \$10,000 to \$12,000.

Tex., Clint.—Clint Gin Co. inceptd.; capital \$25,000; Lee Moore, J. A. Fields, J. B. Dale.

Cottonseed-Oil Mills.

Ga., Bainbridge.—Empire Cotton Oil Co.; rebuild burned plant.

Tenn., Monroe.—Monroe Cotton Oil Co.; increase capital from \$100,000 to \$200,000.

Tex., Leonard.—Leonard Oil Mill Co. inceptd.; capital \$75,000; J. A. Craft, O. S. and W. L. Ferguson.

Drainage Systems.

Ark., Eudora.—Otter Drainage Dist., Chicot County, organized; C. G. Moon, M. Shwartz, John T. Chambers, Comms.; drain 23,900 acres adjacent to Mississippi River.

Ga., Griffin.—Spaulding County Comms., J. P. Durkee, Secy.; dredge Troublesome Creek; 6.6-mi. main ditch, 1-mi. lateral; drain 600 acres; \$35,000; Thompson & Moseley, Contrs.; Healy Bldg., Atlanta, Ga.; Cecil L. Flife, Engr., Fayetteville, Ga. (Bids lately noted.)

Md., Easton.—Talbot County Comms.; construct drainage system; drain several thousand acres; Kastenhuber & Anderson, Engrs.

Miss., Belzoni.—Belzoni Drainage Coms., S. Castleman, Prest.; dredge 112 mi. ditches. (See Machinery Wanted—Dredging.)

Va., Norfolk.—Princess Anne County Commissioners, Pungo Drainage Dist. No. 1, W. T. Braithwaite, Chrmn.; construct drainage system; remove 34,304 cu. yds. earth; bids until Oct. 8. Previously noted bids until July 23. (See Machinery Wanted—Drainage System.)

Electric Plants.

Fla., Jacksonville.—City Coms.; construct 13,000-volt high-power electric-light line to Federal Ice Co.'s plant.

Fla., Oldsmar.—Oldsmar Electric & Ice Co., Jas. H. Thompson, Prest., and Gen. Mgr.; build 50x30-ft. concrete construction powerhouse addition; \$25,000; construct 6-mi. transmission line to Safety Harbor, Fla.; \$25,000; G. A. McNally, Engr.; Reolds Farms Co., Contr. (Lately noted construct plant addition.)

Ky., Blackey, P. O. Whitesburg.—Town; grant light franchise; bids until Oct. 7. Address The Mayor.

Ky., Whitesburg.—W. C. Daniel & Son, W. C. Daniel, Sr., Mgr-Engr.; construct \$5,700 plant; steam power-house; construction by owner; install 12x16 or 18-ft. engine and 50-K. W. A. C. 125-volt generator with switchboard complete. (See Machinery Wanted—Engine; Generator.)

La., Crowley City.—City; construct light, power, water and gas plants; vote on \$500,000 bonds. Address The Mayor.

Md., Baltimore.—Inter-continental Development Co., 101 E. Fayette St., inceptd.; Frank C. Bowers, Frank W. Demuth, Stirling G. Ward.

Md., Oakland. — City; purchase Oakland electric-light plant; vote on \$50,000 bonds. Address The Mayor.

N. C., New Holland.—North Carolina Farms Co., New Holland, and care Benham & Richard, Columbus, O.; install electric-lighting, water and sewer systems; \$50,000; H. E. Miller Contracting Co., Contr., Columbus, O. (Lately noted bids until Sept. 10.)

N. C., Winston-Salem. — Electric Light & Power Corp.; increase capital to \$500,000.

Okl., Owasso.—Owasso Power & Light Co. inceptd.; capital \$10,000; E. L. Mayfield, Bert Swift, J. E. Moore.

S. C., Lamar.—Lamar Power & Light Co.; secured franchise to furnish power and light.

Tex., Ballinger.—City; construct electric-light plant; purchase power, machinery lines and poles. Address The Mayor. (See Machinery Wanted—Electric-light Equipment.)

Tex., Memphis.—Fred Miller, Hollis, Okla.; erect light, power and ice plant.

Va., Harrisonburg. — West Harrisonburg Light Co. inceptd.; capital \$5000; H. A. Logan, Prest.; J. S. Flory, Secy.

Fertilizer Factories.

S. C., Greer.—Greer Fertilizer Co.; increase capital from \$10,000 to \$150,000.

Va., Emporia. — Emporia Potassium Phosphate Co. organized; G. L. Vincent, A. F. Dodd; both Emporia; R. F. Graves, Raleigh, N. C.; A. L. Kreiss, Meriman, Neb.; mfre. fertilizer from feldspar and phosphate rock. (Lately noted inceptd., capital \$50,000.)

Flour, Feed and Meal Mills.

Ark., Alpena Pass.—J. H. Ragland; rebuild burned flour and grist mill.

Ky., Pleasureville.—Joseph Gividen; rebuild burned grist mill and machine shop; loss \$5000.

Md., Rohrersville.—Rohrersville Milling Co. inceptd.; capital \$60,000; Noah C. Mullendore, Rohrersville; Jno. S. Zecker, Burkittsville, Md.; Otto W. King, Boonsboro, Md.

N. C., Walkertown.—Booe & Ogburn; rebuild burned flour mill; loss \$60,000.

Va., Bridgewater.—Ideal Milling Co. inceptd.; capital \$50,000; Herbert G. Patterson, Prest.; Jos. S. Click, Secy.

Foundry and Machine Plants.

Ala., Birmingham.—Electrical Repairing.—S. W. Oliver; establish plant; rebuild electric motors and generators.

Ky., Louisville.—Cars.—Continental Car Co. of America; increased capital from \$500,000 to \$1,150,000.

Ky., Pleasureville.—Joseph Gividen; rebuild burned machine shop and grist mill; loss \$5000.

Md., Baltimore.—Peeling Machines.—Harding Peeling Machine Co., 37 S. Liberty St., inceptd.; capital \$50,000; Robert E. Post, Frederick W. Claybrook, Homer Hurst.

Md., Baltimore.—Foundry.—South Baltimore Harbor & Improvement Co., Fidelity Bldg.; erect 2-story 10x39-ft. fireproof foundry; Steve Martsek, Archt.; Jas. Brown, Contr.

Md., Baltimore.—Elevators.—General Elevator Co., Geo. R. Zorn in charge, 428 E. Saratoga St.; remodel plant; brick construction.

Tenn., Chattanooga.—Stoves. — Tennessee Stove Works; increased capital from \$100,000 to \$150,000.

Miss., McComb.—Machine Shop. — General Equipment & Welding Co., W. R. Meeder, Mgr.; erect 40x135-ft. machine shop; brick construction; \$40,000; Mills Construction Co., Contr. (Lately noted to erect addition.)

S. C., Columbia.—Sawmill Machinery.—J. H. Miner Saw Mill Mfg. Co.; erect building; galvanized-iron construction; \$3000.

Tenn., Chattanooga.—Boilers.—Walsh & Weldner Boiler Co.; increased capital from \$300,000 to \$700,000; replace some temporary buildings with permanent plant structures; contract awarded.

Tenn., Lenoir City.—Cars.—Lenoir City Car Works; erect plant addition; mfre. brass journals and engine bearings; equipment purchased; annual capacity brass foundry, 6,000,000 castings.

Tex., Dallas.—Oil-well Tools. — Guiberson Corp., R. S. Haseltine, Mgr., Box 1106; erect 25x100-ft. plant addition; fireproof construction; install lathes, shapers, etc.; Fred A. Jones, Contr.

Tex., Houston.—Foundry.—Gray Engineering Works, H. Gray, Prest., Galveston, Tex.; acquired buildings on ship channel; remodel for foundry.

W. Va., Huntington.—Rails.—West Virginia Rail Co., Harry Zeller, Prest.; erect 30,000-ft. addition; \$50,000.

W. Va., New Cumberland.—Steel.—Ohio River Steel Foundry Co. inceptd.; capital \$330,000; Thomas Heyward, Carlton Hughes; both Pittsburgh, Pa.; Alexander Sweeney, Millville, W. Va.

Gas and Oil Enterprises.

Ga., Americus.—Retort Unit.—Americus Lighting Co.; repair and improve gas plant; install additional retort unit.

Ky., Louisville.—Meek Oil Co. inceptd.; capital \$50,000; M. C. Curd, Roy T. Yeager, E. M. Drummond.

Ky., Prestonsburg.—Ain Oil Co. inceptd.; A. T. Patrick, E. W. Pendleton, Thos. S. Haymond.

La., Crowley City. — City; construct gas, light, power and water plants; vote on \$500,000 bonds. Address The Mayor.

La., New Orleans.—Eagle Point Oil Co.; increase capital from \$30,000 to \$100,000.

La., New Orleans.—Purifiers.—New Orleans Gas Light Co., Baronne and Common Sts.; construct three 36x36x12-ft. steel purifiers, P. & A. extractor and washer; remodel two 11-ft water gas sets; install 2 generators; Western Gas Construction Co., Contr., Buchanan, Holt and Winter Sts., Ft. Wayne, Ind.

Md., Accident.—Accident Oil & Gas Co. inceptd.; capital \$100,000; Gilmore H. DeWitt, Randall M. Ravenscroft, Ernest B. Jones.

Md., Baltimore.—Conway Oil & Consolidating Co., 414 E. Lexington St. inceptd.; capital \$100,000; Conway W. Cook, Wm. H. Stout, Jas. P. McCloskey.

Md., Baltimore.—Intercontinental Development Co., 101 E. Fayette St., inceptd.; Frank C. Bowers, Frank W. Demuth, Stirling G. Ward.

Ola., Cushing.—Oil-pipe Line.—Home Pipe Line Co. inceptd.; capital \$25,000; L. D. Gaunt, A. N. Little, L. D. Berry.

Ola., Heavener.—Noheave Oil Co. inceptd.; capital \$50,000; W. G. Wright, O. L. Hall; both Heavener; M. W. Shufeldt, Nowata, Okla.

Ola., Oklahoma City.—Sapre Oil & Gas Co. inceptd.; capital \$150,000; M. Sapre, Chicago, Ill.; C. E. and E. M. Wakefield; both Anadarko, Okla.

Ola., Tulsa.—Brooks Drilling Co. inceptd.; capital \$10,000; Jno. Brooks, A. A. Davidson; both Tulsa; J. W. King, Morris, Okla.

Tenn., Temple.—Water Gas.—Temple Gas Light Co., Harry Firstbrook, Mgr.; enlarge and improve plant; \$50,000; construct 50,000

cu. ft. capacity gasholder supplementary to present 80,000-ft. holder; install 100 H. P. steam boiler, 4 or 5-ft. water-gas set, steam-driven exhauster and duplicate gas-making mchys.; daily output 200,000 cu. ft. carbureted water gas. (Lately noted improve and extend plant.)

Va., Norfolk (R. F. D. 2).—Repairing.—Campostella Machine Works inceptd.; capital \$30,000; Henry C. Palmer, Prest.; W. J. Luke, Secy.

W. Va., Huntington.—Kentucky Lincoln Oil & Gas Co. inceptd.; capital \$50,000; J. G. Milburn, Virgil L. Bartram, E. R. Coulter.

W. Va., Ravenswood.—Turkey Fork Oil Co. inceptd.; capital \$50,000; J. C. Jordan, J. B. Sterrett, H. B. Buster; all Charleston, W. Va. Jones, Contr.

Hydro-Electric Plants.

Ola., Sandy Springs.—Sandy Springs Light, Heat & Power Co., C. Page, Prest.; build 10 mi. high voltage transmission line on Arkansas river from Sanday Springs to Tulsa, Okla.

Tex., Moran.—Albany Light & Stone Quarry Co., Albany, Tex.; construct high-power electrical transmission line from Albany; install water-works; dam Deep Creek for water reserve; \$90,000.

Ice and Cold-Storage Plants.

Ala., Birmingham.—Centennial Ice Co.; erect cold-storage plant; brick construction; \$15,000.

D. C., Washington.—American Ice Co.; erect ice and storage plant; purchased 17,000 sq. ft. site; daily output 120 tons; storage capacity 12,000 tons.

Md., Baltimore.—American Ice Co., Calvert Bldg.; erect concrete and steel storage building; bidders are: George A. Fuller Construction Co., American Bldg.; Consolidated Engineering Co., Calvert Bldg.; General Construction Co., Calvert Bldg.; West Construction Co., American Bldg.; Frainis Bros. & Haigley, 18 Clay St.; Baetram Constable Co., 2 W. Lafayette Ave.; Walter G. Tovell, Eutaw and McCulloch Sts.

Tex., Ballinger.—C. S. Guin; erect building; ordinary construction; \$10,000 to \$15,000; bids until later part Oct.; install ice plant, 25 to 40-ton daily capacity. Lately noted to erect plant. (See Machinery Wanted—Ice Plant.)

Tex., Memphis.—Fred Miller, Hollis, Okla.; erect ice, light and power plant.

Land Developments.

Fla., Lake Jem.—Jem Nursery Co. inceptd.; D. C. Sherman, F. A. Reed, L. E. Klatte.

Fla., Leesburg.—Saidlin-Hopkins-Butt Co. inceptd.; capital \$100,000; Thos. Hopkins, Prest.; A. R. Saidlin, Secy.-Treas.

Florida.—North Florida Pecan Groves, 3 E. Lexington St., inceptd.; capital \$350,000; Frank E. Welsh, Jr., Richard E. Preece, Thos. H. Sanks; all of Baltimore, Md.

Fla., Umatilla.—Umatilla Fruit Co. inceptd.; Chas. J. Turner, H. A. Wilson, W. L. Yancey.

Fla., Wauchula.—Scenic Highlands Citrus Corporation chartered; capital \$26,000.

Tenn., Rockwood.—Rockwood Orchard Co. inceptd.; capital \$10,000; Polk Tarwater, J. N. Burnett, T. L. Peterman.

Tex., Belton.—City; improve parks; voted \$25,000 bonds. Address The Mayor. (Lately noted to vote bonds.)

Tex., Waco.—City Comms., W. J. Neale, E. W. Marshall; develop Wm. Cameron Park; 400 acres; construct roads and swimming pool; install water system, moving pictures, etc.; vote on \$65,000 bonds. (Lately noted improve park.)

October 7, 1920.

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W. Va., Huntington.—Monticello Land Co. inceptd.; capital \$50,000; C. S. Louden, A. E. Botts, E. L. Rock.

Lumber Manufacturing.

Fla., Escambia.—Ray Saw Mill Co. (lately noted inceptd., capital \$250,000) organized; Paul Ray, Prest.-Mgr.; T. M. Stevens, V.-P.; E. L. McGowin, Mgr.; all Pensacola, Fla.; erect right-hand single band mill; mill construction; mchvy. purchased. (See Machinery Wanted—Boiler.)

La., Mermonton.—Texas Oil Co.; purchased saw mill; improve plant; build houses, etc.

Md., Baltimore.—Chiapas Corp., Equitable Bldg., inceptd.; Robert K. Thistle, A. Roy Myers, Raymond J. Gorman.

Miss., De Kalb.—Stalworth Lumber Co.; erect \$1000 building; ordinary mill construction; install 25 H. P. mill; estimated cost \$6000. (Lately noted to rebuild burned plant.)

Miss., Meadville.—E. H. Butler; rebuild burned saw mill; loss \$40,000.

Okla., Muskogee.—Louisiana Lumber Co. inceptd.; capital \$30,000; N. G. and S. Bond; both Muskogee; S. S. Potter, Miami, Fla.

S. C., Columbia.—Southern Wholesale Lumber Co.; increased capital to \$100,000.

S. C., Marion.—Marion Lumber Mfg. Co. inceptd.; capital \$12,000; R. M. Winn, Prest.; E. C. Shepard, V.-P. and Secy.; William Page, Treas.

Tex., Lufkin.—McKinney Lumber Co. inceptd.; capital \$5000; J. C. McKinney, C. H. Duval, J. H. Miller.

Va., Lynchburg.—Blue Ridge Lumber Co. inceptd.; capital \$25,000.

Metal-Working Plants.

Md., Baltimore—Cans.—American Can Co., Maryland Trust Bldg.; erect factory; reinforced concrete and fireproof construction; 4 stories; bids until Oct. 1; bidders are: Consolidated Engineering Co., Calvert Bldg., West Construction Co., American Bldg.; both Baltimore; Turner Construction Co., 244 Madison St., New York; Warren, Moore & Co., Philadelphia, Pa.; C. Z. Tries, Engr., New York.

Md., Cambridge—Wire Cloth.—Cambridge Wire Cloth Co.; increased capital from \$23,020 to \$50,000.

Mining.

Ga., Cartersville—Potash.—American Metal Co., 61 Broadway, New York; testing process to extract potash from slate; proposes to build large plant.

Ky., Ashland—Iron.—Ashland Iron & Mining Co.; increased capital from \$1,547,000 to \$1,800,000.

Md., Baltimore—Feldspar.—Patapsco Feldspar Co., 4014 Maine Ave., inceptd.; capital \$100,000; Albert E. Dromon, Sr., Gustav J. Kordula, John Weetenkamp.

Md., Bel Air—Flint and Feldspar.—Maryland Flint & Feldspar Co. inceptd.; capital \$500,000; Edward G. Bucklin, Paul B. McFarland, Lawrence C. Gray.

S. C., Charleston—Phosphate.—Independent Phosphate Mining Co. inceptd.; capital \$50,000; M. M. Hutchinson, Prest.; P. H. Seabrook, Jr., Secy.-Treas.

Tenn., Chattanooga—Stone.—Tennessee Stone Co.; increased capital from \$100,000 to \$150,000.

Tex., Amarillo—Lead.—W. B. Estes; construct lead smelter; contemplated.

Tex., Dallas—Gravel.—Clem Gravel Co. incorporated; capital \$300,000; A. W. Clem, J. G. Strawn, E. H. Jones.

Va., Cedar—Limestone.—Jas. B. Russell, Winchester, Va.; represents New York interests having option on 400 acres limestone land; plan build \$300,000 plant to quarry and crush limestone.

Miscellaneous Construction.

Fla., Tampa—Municipal Terminal.—Port Commrs., S. M. Sparkman, Prest.; dredge Port slip in Ybor channel; 150 ft. wide, 27 ft. deep; remove 400,000 cu. yds. material; until Nov. 1; Benj. Thompson, Engr., Box 1044. Supersedes recent item. (See Machinery Wanted—Dredging.)

Md., Cumberland—Mausoleum.—Sanitary Mausoleum Co., U. J. Smith, Mgr., Reading, Pa.; construct \$140,000 mausoleum; fireproof; H. S. Sewert, Contr., Toledo, O.; Harris W. Voorhees, Archt., Trenton, N. J.

Mo., Kansas City—Memorial Monument.—Liberty Memorial Assn., Henry M. Beardsley, Chrmn.; build memorial; select plans by competition.

Tex., Houston—Wharves, Docks, etc.—City Comms.; plans to construct wharf and dock additions on ship channel; purchase additional channel frontage; extent Municipal Belt Ry. to serve various industries, including city's cotton wharves; recommended by Houston Harbor Board.

Tex., Waco—Swimming Pool.—City Comms., W. J. Neale; construct swimming pool, roads, water system, etc. in William Cameron Park; vote on \$65,000 bonds.

W. Va., Clarksburg—Mausoleum.—Sanitary Mausoleum Co., H. B. Brooks, Director, Reading, Pa.; erect 1-story mausoleum in Elk View Cemetery; granite construction; tile roof; capacity 624 cribs; \$135,000 to \$140,000; contemplated.

Miscellaneous Enterprises.

Fla., Eustis—Printing.—Lake Region Printing Co. organized; A. D. Miller, Mgr.; erect 33x130-ft. building; brick and stucco construction; \$15,000; install job and cylinder presses, etc.; Allan McDonough, Archt., Kissimmee, Fla. Lately noted inceptd., capital \$40,000, and to erect additional building. (See Machinery Wanted—Printing Machinery.)

Ky., Covington—Printing.—Cobb Linotyping Co. inceptd.; capital \$10,000; William and Clifford Cobb, Maurice L. Calvin.

Ky., Nicholasville—Construction.—Higgins Construction Co. inceptd.; capital \$15,000; W. D. and J. D. Betts, James Higgins.

Ky., Pineville—Publishing.—Sun Publishing Co.; increased capital from \$2500 to \$10,000.

La., Lockport—Construction and Towing.—Clooney Construction Towing Co.; increased capital from \$30,000 to \$100,000.

Md., Baltimore—Engineering.—Craig Engineering Co., Equitable Bldg.; increased capital from \$25,000 to \$75,000.

Md., Baltimore—Electrical Fixtures.—Tucker-Partree Electric Co., 122 Hollingsworth St. inceptd.; capital \$50,000; Francis Tucker, Clarence E. Partree, Isaac T. Parks, Jr.

Md., Baltimore—Steamship Line.—West Indian Navigation Co., 3 E. Lexington St., inceptd.; capital \$100,000; Frank E. Welsh, Jr., Richard E. Preece, Thomas H. Sanks.

Md., Baltimore—Poultry.—Vashon Poultry Farms Co., 34 Central Savings Banks Bldg. inceptd.; capital \$250,000; Wallace A. Curtis, Samuel M. Brower, Wilton Snowden, Jr.

Md., Baltimore—Sponging, Shrinking, etc.—Rothholz Bros., 515 W. Lombard St., inceptd.; capital \$75,000; Julius Rothholz, Matthew J. Munz, Solomon Mendels.

N. C., Raleigh—Laundry.—State Hospital for Insane; rebuild burned laundry; loss \$100,000.

Okla., Tulsa—Printing.—Purcell Printing Co. inceptd.; capital \$10,000; F. L. Purcell, P. S. Pritchard, P. B. Havenstrite.

Tex., Amarillo—Laundry.—Amarillo Cooperative Laundry inceptd.; capital \$28,000; O. V. Morrison, J. B. Grentz, S. W. Hammer.

Tex., Fort Worth—Incinerators.—City; Jas. Liston, Secy.; install 3 single-unit 12-ton, and one 2-ton garbage incinerators; bids until Oct. 11. (See Machinery Wanted—Incinerators.)

Tex., Pharr—Laundry.—Valley Laundry Co.; increased capital from \$5000 to \$15,000.

Va., Fort Myer—Dry Cleaning.—Construction Service, Q. M. C., Room 2038, War Trade Bldg., 20th and B Sts., Washington, D. C.; erect dry-cleaning building; bids until Oct. 18.

Va., Norfolk—Transportation.—American Water & Barge Corp. chartered; capital \$50,000; J. B. Mullin, Prest.; F. W. Culpeper, Secy.

W. Va., Williamson—Printing.—Sterling Printing Co. inceptd.; capital \$20,000; W. H. Hurst, H. M. Smith, W. G. Wiles.

Miscellaneous Factories.

Ala., Anniston—Whistle.—Whistle Company of Calhoun and Talladega Counties organized; capital \$30,000; W. A. White, Prest.; Chas. Thigpen, Secy., Treas. and Gen. Mgr.

Ala., Birmingham—Creamery.—Birmingham Creamery Co. inceptd.; capital \$60,000; Jas. M. Kidd, Prest.; Thorwald Hansen, Treas.

Ark., Little Rock—Shoes.—Saifer Shoe Co.; remodel buildings; \$20,000; contract let.

Fla., Lakeland—Drugs.—Cason & Tacker Drug Co. inceptd.; capital \$10,000; L. O. Cason, Prest.; Lee Allen, Secy.-Treas.

Fla., Fort Myers—Clothing.—T. Gay Brough Co. inceptd.; capital \$25,000; T. Gay Brough, Prest.; R. A. Henderson, Secy.-Treas.

Fla., St. Augustine—Awnings.—Windshield Awning Co. inceptd.; capital \$100,000; J. D. Ingraham, Prest.; Ernest A. Wiles, Jr., Secy.-Treas.

Fla., Tampa—Waste Paper.—Florida Waste Paper Co. inceptd.; capital \$10,000; J. Filler, Prest.; Meyer Kotler, Secy.-Treas.

Fla., Quincy—Tobacco.—Quincy Creek Tobacco Co. inceptd.; capital \$250,000; G. H. Malone, Prest.; D. C. Carmichael, Secy.-Treas.; both Dothan, Ala. (Supersedes recent item.)

Ga., Atlanta—Coca-cola.—Coca-cola Co.; construct 3-story-and-basement concrete factory building; Arthur Tufts Co., Contr., Candler Annex.

Ga., Brunswick—Bottling.—Pepsi-Cola Co., Newbern, N. C.; contemplates establishing \$100,000 bottling plant and syrup-distributing depot.

Ga., Millen—Turpentine, etc.—R. Y. Lane; rebuild burned turpentine still and naval stores plant; loss \$3500.

Ga., Savannah—Pepsi-Cola Syrup.—Pepsi-Cola Co., New Bern, N. C.; establish syrup factory; contemplated.

Ga., Savannah—Cooking Oils, etc.—Southern States Packing Co., B. F. Williamson, V.-P.; establish compound factory for cooking oils, soap, etc.; also meat-packing plant; Brooks Engineering Co., Engr., Moultrie, Ga. (Lately noted establish plant.)

Ky., Covington—Window Shades.—Flexus Window Shade Co. inceptd.; capital \$10,000; Wm. A. McDonough, H. D. McClure, M. H. McLean.

Ky., Danville—Medicinal Oils.—Lewis-Blair Co. inceptd.; capital \$10,000; R. D. Lewis, F. H. Blair, C. R. Given.

Ky., Danville—Monuments.—Woodson & Kratch; increase capital to \$25,000.

Ky., Lexington—Bottling.—Coca-Cola Bottling Co., Chas. Mitchell, Mgr., 265 Water St.; construct 1 and 2-story 136x63-ft. bottling plant; E. Stamler, Archt., Fayette Bank Bldg. (Supersedes recent item.)

Ky., Lexington—Bottling.—George Weideman Sales Co., inceptd.; capital \$50,000; Jno. M. Richardson, Fayette Wilkenson; both Lexington; Howard M. Benton, Ft. Thomas, Ky.

Ky., Louisville—Bottling.—George Weideman Distributing Co., inceptd.; capital \$50,000; F. A. Gruber, F. J. Deuser; both Louisville; Howard M. Benton, Ft. Thomas, Ky.

Ky., Louisville—Books.—Kentucky Book Mfg. Co.; increase capital from \$10,000 to \$20,000.

Ky., Louisville—Candy.—National Candy Co., Frank Menne, Mgr., Main and Wenzel Sts.; construct 5-story-and-basement 216x134-ft. factory building; brick, concrete and steel; D. Murphy, Archt., Louisville Trust Bldg. (Late noted purchased 200x300-ft. site.)

Ky., Louisville—Women's Furnishings.—Devejian & Isler Co.; increase capital from \$6000 to \$30,000.

Ky., Louisville—Cigars.—Camezzi-Hackett Co., inceptd.; Lawrence and Sarah Camezzi, Louis Hackett.

La., New Orleans—Pepsi-Cola Syrup.—Pepsi-Cola Co., New Bern, N. C.; establish syrup factory; contemplated.

La., Shreveport—Sheet Glass.—United States Window Glass Co., Walter A. Jones, Prest., Morgantown, W. Va.; establish \$1,000,000 glass mfg. plant; construct 1600x700-ft. brick, concrete and steel buildings; first main building 425x300 ft.; steel; install 3 continuous tanks or melting furnaces; erect employes' houses.

Md., Baltimore—Insecticide.—Kaylo Insecticide Co., 420 Belview Ave., inceptd.; capital \$50,000; Jno. M. Jones, Charles F. Graffin, Cosie M. Eyler.

Md., Baltimore—Bakery.—Bondek Co., 509 Calvert Bldg., inceptd.; capital \$10,000; Frederick R. Schollian, Pierre Bon Siegneur, Eugene G. West.

Md., Baltimore—Envelops.—Oles Envelope Corp., 514 E. Lombard St., inceptd.; capital \$150,000; Burdette S. and Hiram G. Oles, Jno. B. Berger.

Md., Baltimore—Pepsi-Cola Syrup.—Pepsi-Cola Co., New Bern, N. C.; establish syrup factory; contemplated.

Md., Baltimore—Leon Rasst, 2340 Euclid Place; construct 1-story 38x20 ft and 170x51-ft. factory buildings; frame and brick; Callis & Callis, Archts., 2055 Kennedy Ave.

Md., Baltimore—Cereal Sugar.—Baltimore Pearl Hominy Co., A. W. Smith, Chemist, foot Howard St.; install additional mech.; increase daily capacity from 25 to 100 bbls.; plans construction additional buildings for ultimate daily capacity of 300 bbls.

Md., Halpine—Shoe Heels.—International Shoe Heel Corp., A. K. Pomeroy, Prest., Philadelphia, Pa., and Boston, Mass.; purchased 119½ acres; establish shoe factory; erect dwellings.

Md., Salisbury—Bakery.—Salisbury Baking Co.; increase capital from \$30,000 to \$150,000.

Tenn., Jackson—Polish.—Velvet Polish Works; establish plant to mfre. polish for furniture, etc.

Miss., Jackson—Tire Patch.—J. D. Roberton Co.; establish factory to mfre. tire patch and other automobile accessories.

Mo., Kansas City—Cement Paint.—Hughes Paint & Oil Co. organized; G. E. Hughes, Prest.; W. A. Collings, Local Mgr.; leased 2-story building; mfre. cement paint.

Mo., Kansas City—Lamps.—Sunshine Safety Lamp Co., care W. H. Hoffstot, 1005 McGee St.; construct 1-story-and-basement 115x50-ft. factory building; brick and reinforced concrete; R. A. Curtis, Archt., 536 Reserve Bank Bldg.; W. H. Huff, Struct. Eng., 313 Interstate Bldg.

Mo., St. Louis—Spark Plugs.—King-Bee Spark Plug Co., 2502 Cass Ave., organized; F. J. Reppenagen, Prest.; Oswald Trova, V.-P. and Mgr.; R. J. White, Secy.; W. A. Gwynn, Treas.; has building; install automatic screw machines; daily output 2000 spark plugs. (Late noted inceptd., capital \$60,000.)

Mo., St. Louis—Paper.—Crescent Paper Co., E. H. Ronick, Prest., 413 N. 2d St.; construct 2-story 100x80-ft. rotary-room; Thos. Tucker, Engr., 413 N. 2d St.; Wimmer Construction Co., Gen. Contr., Victoria Bldg.

Mo., St. Louis—Brewery.—Anheuser-Busch Brewing Assn., A. Busch, Prest.; improve plant; construct kiln and chip addition; Hartman & Schuerman, Gen. Contrs., Odd Fellows' Bldg.

Mo., Webb City—Paint and Cloth.—Rock Hill Paint & Cloth Co., Thos. Crooks, V.-P. and Gen. Mgr.; construct 2-story 150x60-ft. fireproof factory buildings; structural concrete; bids about Oct. 31; 60x40-ft. engine-room, with 70-ft. chimney; install three 15-ton and two 50-ton hoppers; install \$50,000 grinding and paint mills, jaw crushers, Diesel engines, pulverizers and link-belt conveyors; output 24,000 gals. printers' ink, mineral paint, glue, waterproof cloth, phosphate fertilizer; Bucy-Miller Engineering Co., Constr. Engr., Bartlett Bldg., Joplin, Mo.

N. C., Greensboro—Chero-Cola.—Piedmont Chero-Cola Bottling Co.; increase capital from \$100,000 to \$300,000.

N. C., Greensboro—Cigars.—West Indies Cigar Co., 503 E. Market St. inceptd.; capital \$100,000.

N. C., Lexington—Bottling.—Pepsi-Cola Co., New Bern, N. C.; contemplates establishing \$100,000 bottling plant and syrup-distributing depot.

N. C., Shelby—Bottling.—Pepsi-Cola Co., New Bern, N. C.; contemplates establishing \$100,000 bottling plant and syrup-distributing depot.

N. C., Wilson—Marble.—Wilson Marble Works; establish plant; erect building.

Okla., Altus—Ice Cream.—Altus Ice Cream Co., inceptd.; capital \$50,000; M. T. Cochran, C. C. Henry, C. Hightower.

Okla., Ardmore—Southern Supply Co. incorporated; capital \$250,000; E. Dunlap, S. A. Apple, both Ardmore; T. J. Spikes, Headton, Okla.

Okla., Enid—Bakery.—Bayer Baking Co., inceptd.; capital \$75,000; L. E. Bayer, O. G. Snyder, W. H. Hills.

Okla., Newkirk—Creamery, etc.—Kay County Creamery & Produce Co., inceptd.; capital \$20,000; Jno. Linderman, Arthur Severin, F. E. Adams.

Okla., Okmulgee—Shoes.—Giles Shoe Co., inceptd.; capital \$150,000; G. L. Giles, H. A. and E. G. Gingerich.

S. C., Columbia—Bottling.—Coca-Cola Bottling Co.; construct building.

S. C., Spartanburg—Bottling.—Pepsi-Cola Co., Newbern, N. C.; contemplates establishing \$100,000 bottling plant and syrup-distributing depot.

Tenn., Columbia—Drugs.—Stephenson Drug Co., inceptd.; capital \$15,000; Theodore F. Stephenson, Chas. W. Roberts, H. S. Payne.

Tenn., Memphis—Bell-Hardwick Co-operative Mfg. Co., inceptd.; capital \$15,000; Wm. Bell, A. G. Hardwick, W. A. Plummer.

Tenn., Memphis—Perfumes, etc.—General Mfg. Co., inceptd.; capital \$150,000; W. D. Cannon, B. A. Bogy, W. W. Swift; establish plant to mfre. perfumes and toilet articles.

Texarkana—Bottling.—Pepsi-Cola Co., Newbern, N. C.; contemplates establishing \$100,000 bottling plant and syrup-distributing depot.

Tex., Houston—Revolving Stores.—C. O. Ogden, 220 Milam St.; construct \$30,000 plan to mfre. revolving stores.

Va., Basic—Fruit Products.—National Fruit Products Co., Wm. Dawson, Woodward Bldg., Washington, D. C.; contemplates construction 3-story, apple product plant; reinforced concrete; Milburn, Heister & Co., Archts., 710 14th St. N. W., Washington, D. C. (Late noted acquired 5-acre site.)

Va., Danville—Oils.—Lewis-Blair Co. incorporated; capital \$10,000; R. D. Lewis, F. H. Blair, C. R. Givens.

Va., Lynchburg—Shoes.—Liberty Shoe Co. organized; capital \$50,000; S. Scheinberg, Prest.; I. Cobre, Secy.-Treas.

Va., Petersburg—Shoes.—Standard Shoe Co., inceptd.; capital \$25,000; Max Jacobs, Prest.; Benjamin Jacobs, Secy.

W. Va., Charles Town—Harness.—United States Harness Co., inceptd.; capital \$200,000; Geo. B. Goetz, Prest., Charles Town; Jos. C. Byron, Treas., Hagerstown, Md.; establish factory; equip to recondition surplus artillery harness.

W. Va., Huntington—Lungardia.—A. L. Austin; contemplates establishing plant to mfre. lungardia.

W. Va., Huntington—Beverages.—Tri-State Distributing Co., inceptd.; capital \$10,000; Fred Easley, R. P. Burks, A. Solof.

W. Va., New Martinsville—Glass.—New Martinsville Glass Mfg. Co., Ira M. Clark, Secy.-Mgr.; repair burned plant; \$20,000; interior of 150x100-ft. fireproof building; brick and steel floors, etc.; has mch.; daily output 200 bbls. press glassware; Jas. H. Matthews & Sons, Archts. (See Machinery Wanted—Bricks; Iron Beams.)

Motor Cars, Garages, Tires, Etc.

Fla., Jacksonville—Automobiles.—Wilson-Rogers Motor Co., inceptd.; capital \$25,000; W. G. Wilson, M. S. Rogers, W. B. Roper.

Fla., Orlando—Garage.—Cook Automobile Co., J. M. Cook, Prest.; erect \$60,000 garage; 80x90 ft.; reinforced concrete; fireproof; Johns-Mansville roofing; concrete and tile floor; gas radiator; electric-lighting plant; freight elevators; C. C. Hanner, Contr.; F. H. Trimble, Archt. (Late noted.)

Fla., St. Petersburg—Garage.—P. K. Smiley; erect garage; 40x100 ft.

Fla., Tampa—Automobiles.—Interstate Sales Corp. chartered; capital \$200,000; Rheo Brentford, J. E. Newlands, H. W. Roselle.

Fla., Tampa—Garage.—Roy Daniels and Carsten C. Johnson; occupy \$35,000 garage to be erected by Oscar Daniels; 1 story; 98x80 ft.; red brick; G. A. Miller, Contr. (Late noted.)

Ky., Paducah—Automobiles.—Union Motor Co., inceptd.; capital \$50,000; R. Callissi, Geo. Steinhauser, W. P. Allen.

La., Shreveport—Tires, etc.—344 Tire Service Co., 402 Marshall St., organized; James R. Emery, Prest.-Mgr.; King Merritt, V.-P. Mgr.; I. S. Emery, Secy.-Treas.; install vulcanizing plant and ties sales and service station equipment; bids until Oct. 1. (See Machinery Wanted—Tires, etc.; Vulcanizing Equipment.)

Md., Baltimore—Garage.—Greenberg Co.; erect automobile building; Leroy Rothschild, Archt.; both Philadelphia, Pa.

Md., Baltimore—Trucks, etc.—Dunbar Taxi Co., 445 Druid Hill Ave., inceptd.; capital \$5000;

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Walter K. Langley, Medota Buckingham, Oliver Hankins.

Md., Baltimore—Motors.—Hilton Motor Corp., chartered; Frederick Ave. and Hilton St.; capital \$5000; Benj. J. Kaiss, L. Sterling Wagner, Benj. S. Wagner.

Md., Baltimore—Automobiles.—Palladium Sales Co., 13 W. Eager St. incptd.; capital \$50,000; Edw. J. Fetter, Frank A. Ostenasek, Wm. U. Saneman.

Miss., McComb—Filling Station.—Hugh L. White; erect filling station.

Miss., Ripley—Garage.—Crawford Bennett; erect garage.

Mo., St. Louis—Garage.—Constantine De Franco, 5256 Wilson Ave.; erect garage; 1 story; 50x30 ft.; brick; reinforced concrete; Wedemeyer & Nelson, Archts., Wainwright Bldg.

Mo., St. Louis—Garage.—Chase Ulman, 4510 Linden Blvd.; erect garage and showroom; 1 story; 79x15 ft.; brick; P. J. Bradshaw, Archt., International Life Bldg.

N. C., Henderson.—Landis Motor Co. incptd.; capital \$100,000; E. G. Landis, E. M. Thompson, W. F. Chedston.

N. C., Rockingham—Automobiles.—Automobile Electric Service Co. incptd.; capital \$25,000; F. L. Scarboro, S. E. Croft, W. M. Coffin.

Okla., Bartlesville—Garage.—Indian Territory Oil Co.; erect \$65,000 garage; 1 story; 168x140 ft.; Geo. Winkler, Archt., Tulsa, Okla.

Okla., Oklahoma City—Automobiles.—Paige Motor Co., J. T. Wheatley, Mgr.; erect automobile building; 4 stories; 75x150 ft.; stone over reinforced concrete; showroom with 24-ft. ceiling.

S. C., Charleston—Service Station.—Colonial Service Station incptd.; capital \$5000; A. H. Wichman, Prest.; E. L. Hyde, V.-P.; R. B. Hammes, Secy.-Treas.

S. C., Darlington—Automobiles.—Flinn-Hall Co. incptd.; capital \$30,000; T. Smythe Flinn, Prest.; Hord Stubberfield, V.-P. and Secy.; Edw. P. Hill, Treas.

Tenn., Memphis—Automobiles.—Blue Bird Bus Co. incptd.; capital \$50,000; John H. Bee, J. H. Proudfit.

Tex., Beaumont—Automobiles.—Kyle Owens Motor Co. incptd.; capital \$10,000; Kyle Owens, E. C. Gilmartin, E. S. Sutliff.

Texas, Dallas—Tires.—Pacific Tire Service Co. incptd.; capital \$75,000; R. H. Ahrens, A. W. Forester, F. O. Ebert.

Tex., Dallas—Automobiles.—Auto Car Sales Service Co. incptd.; capital \$10,000; Q. C. Taylor, C. A. Wilcox, E. Cartledge.

Tex., El Paso—Automobiles.—Nash El Paso Motor Co. incptd.; capital \$50,000; O. C. Youngblood, R. W. Prosser, M. J. Youngblood.

Tex., Fort Worth—Automobiles.—Kirberg Motor Co. incptd.; capital \$15,000; W. K. Kirberg, R. L. Foulks, L. L. Manchester.

Va., Newport News—Garage.—McKee, Williams & MacIntire, 25 28th St.; preparing plans for garage; 2 story; 100x100 ft.; brick; reinforced concrete.

Va., Norfolk—Automobiles.—Virginia Roamer Co. incptd.; capital \$50,000; J. Haskell, Secy.; M. Fleischman.

West Virginia—Automobile Manufacturing.—New Detroit Car Corp., Wm. Jordan, Secy.-Treas., Detroit, Mich.; build plant in West Virginia opposite Cumberland, Md.; mfr. 4-cylinder touring car.

W. Va., Welch—Garage.—H. A. Lucas, 621 Law and Commerce Bldg., Bluefield, W. Va.; erect \$40,000 garage; fireproof; install automobile and truck elevator mch.; H. A. Lucas, Bldg. Contr., Bluefield, W. Va.; Martin J. Garry and Robert A. Sheffey, Archts. (Lately noted.)

Railway Shops, Terminals, Roadhouses, Etc.

Va., Radford.—Norfolk & Western Ry., J. E. Crawford, Ch. Engr., Roanoke, Va.; construct roundhouse, machine shops, station, additions to track facilities, etc.; \$1,000,000.

Road and Street Construction.

Ala., Dothan.—City; pave North Foster St.; voted bonds. Address The Mayor.

Ark., Star City.—Lincoln County Commrs. Grady-Arkansas River Road Dist., T. S. Lovett, Secy., Grady, Ark.; construct 13 mi. gravel road; \$325,000; General Construction Co., Contr.; Barkett & Hight, Engrs., 104 Reigner Bldg.; both Little Rock, Ark. (Lately noted inviting bids.)

Fla., Moore Haven.—Town, R. O. Baker, Clk.; construct 12,600 sq. ft. cement sidewalks; 350 cu. yds. parkway; \$6000; Thos. E. Frederick, Engr.; A. T. Calender, Contr. (Lately noted inviting bids.)

Fla., Pensacola—Escambia County Commrs.; construct 102 mi. paved roads; concrete; voted \$2,000,000 bonds.

Ga., Rome.—Floyd County Commrs. Roads and Revenues; construct 7 mi. soil-surfaced roadway; \$65,000 available; J. W. Stapp Construction Co., Contr., Louisville, Ala.; A. A. Simonton, Engr., Rome, Ga. (Supersedes recent item.)

Ga., Savannah.—City; pave streets; vote on \$500,000 bonds. Address The Mayor.

Ky., Whitesburg.—Letcher County Commrs. S. P. Combs, County Judge; construct 4 mi. earth road, Whitesburg to Hindman highway; 100,000 cu. yds. excavation; \$80,900; Contrs., Hale & Hall, Whitesburg, Section 1; T. R. Rainera, Seco, Ky., Section 2; Emmett Blair, Engr. (Lately noted inviting bids.)

La., Alexandria.—Rapides Parish Police Jury; construct 1 1/4 mi. graded road in Calcasieu River swamp; W. M. Wilkes, Contr.

La., Kentwood.—City; construct 5 mi. concrete sidewalks; voted 5-mill tax to float \$30,000 bonds. Address The Mayor.

La., Vivian.—City, A. F. Powell, Mayor; pave 1 1/2 mi. streets; gravel; \$34,000; A. D. Lambert & Co., Contrs., Alexandria, La.

La., Vidalia—Concordia Parish Police Jury; construct 12 mi. road; \$98,325.50; Junkins Bros. & Gregory, Contrs. (Supersedes recent item.)

Md., Baltimore.—Board of Awards; pave Parkside Drive from Harford Rd. to Berkshire Rd.; Berkshire Rd. from Parkside Drive to Harcourt Rd.; Harcourt Rd. from Berkshire Rd. to Tyndale Ave.; cement concrete; bids until Oct. 13. (See Machinery Wanted—Paving.)

Md., Baltimore.—Board of Awards; awarded paving contracts: Waverly Paving Co., Grace or Ridgewood Aves. in Arlington section; P. F. Reddington & Sons, 2 Lexington St., Cottage Ave.; Arundel Construction Co., 911 Eastern Ave., 525 sq. yds. concrete paving, Rankin Pl. between Carey St. and Carrollton Ave.; Geo. Long Contracting Co., 13th and 1st Aves., 900 sq. yds. granite block paving on concrete base, Leakin St., from Boston to Essex St., \$5000. (Lately noted inviting bids.)

Md., Chestertown.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 1 mi. concrete road from Rock Hall Ferry landing toward Rock Hall; Contract K-14; low bidder, Kauffman Construction Co., Denton, Md., at \$36,363. (Lately noted inviting bids.)

Md., Princess Anne.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct .98 mi. State Highway through town; concrete; Somerset County Contract S-12; bids until Oct. 12. (See Machinery Wanted—Road Construction.)

Oct. 12. (See Machinery Wanted—Road Construction.)

Md., Snow Hill.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 3.62 mi. State Highway from Showell to Delaware State line; concrete; Worcester County Contract WO-18; bids until Oct. 12. (See Machinery Wanted—Road Construction.)

Md., Towson.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 1 mi. Falls Rd. from Ridge Church; concrete; Baltimore County; Contract B-40; low bidder, Development & Construction Co., 506 American Bldg., Baltimore, at \$46,700.

Md., Towson.—State Roads Comsn., 601 Garrett Bldg., Baltimore; grade and drain 2.04 mi. Hereford Rd. from York Rd.; Baltimore County, Contract B-38; Howard O. Flirr, Contr., 1707 W. Pratt St. (Lately noted inviting bids.)

Md., Snow Hill.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct filling approach to Pocomoke River bridge; \$19,016.75; Juniata Co., Contr., Philadelphia.

Md., Upper Marlboro.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 1.53 mi. road along Central Ave. toward Hall's Station; concrete; Prince George's County; Contract P-23; low bidder, Henry F. Ringeling, Halethorpe, Md., at \$66,419; 1.50 mi. Defense Highway; concrete; Prince George's County; Contract P-22; low bidder, T. B. Lewis & Son, Hyattsville, Md., at \$65,346.40. (Lately noted inviting bids.)

Md., Westminster.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 4.27 mi. State Highway from end Contract 520 to New Windsor; concrete; Carroll County, Contract CI-27; bids until Oct. 12. (See Machinery Wanted—Road Construction.)

Mis., Clarksdale.—Coahoma County Supvrs., Y. E. Howell, Clk.; construct 3 mi. asphaltic concrete road on old gravel base between Lula and Rich; 8 mi. asphaltic concrete road on old gravel base between Friar Point and Clarksdale; bids opened Oct. 4. (See Machinery Wanted—Road Construction.)

Mis., Clarksdale.—City; construct 14,000 sq. yds. asphaltic concrete pavement; bids opened Oct. 5; Walter S. Bobo, City Engr. (See Machinery Wanted—Paving.)

Mis., Clarksdale.—Coahoma County Supvrs., Y. E. Howell, Clk.; construct 10.6 mi. State Trunk road between Lyons and Coahoma; Federal-aid Project 49; 93,984 sq. yds. concrete paving; bids opened Oct. 5; H. C. Dietzer, State Highway Engr., Jackson, Miss. (See Machinery Wanted—Road Construction.)

Mis., Holly Springs.—Marshall County Supvrs.; construct 4.68 mi. State trunk road between Memphis and Tupelo; Federal-aid Project 39; \$26,000 available; bids until Oct. 16; changed date from Sept. 22; H. C. Dietzer, State Highway Engr., Jackson, Miss. (See Machinery Wanted—Road Construction.)

Mis., Natchez.—Adams County Supvrs.; construct 11.7 mi. gravel road between Natchez and Woodville; Federal-aid Project 53; bridges over 20-ft. span; F. D. Harvey & Co., Contr., Memphis, Tenn.; H. C. Dietzer, State Highway Engr., Jackson, Miss. (Lately noted inviting bids.)

Mis., Natchez.—Adams County Supvrs.; construct 11.7 mi. State trunk road between Natchez and Woodville; Federal-aid Project 53; bridges over 20-ft. span; \$248,000; F. D. Harvey & Co., Contr., Memphis, Tenn. (Lately noted inviting bids.)

Mis., New Albany.—Union County Supvrs.; construct 5 mi. State Trunk Rd. between Memphis and Tupelo; Federal-aid Project 20; Union County Construction Co., Contr., New

Albany; H. C. Dietzer, State Highway Engr., Jackson, Miss. (Lately noted inviting bids.)

Miss., Waynesboro.—Wayne County Supvrs.; construct gravel roads; voted \$75,000 bonds. (Lately noted to vote.)

Mo., Clinton.—State Highway Dept., Jefferson City, Mo.; construct 5.56 mi. Windsor-Leeton road, 24 ft. wide; Federal-Aid Project 132; bids opened Oct. 8.

Mo., Doniphan.—State Highway Dept., Jefferson City, Mo.; construct 14.45 mi. Doniphan-Alton road; Federal-Aid Project 21; bids until Oct. 9.

Mo., Forsyth.—Taney County Commrs., Branson-Kirbyville Special Road Dist.; construct road; vote on \$9000 bonds; Federal aid, \$18,000.

Mo., Fulton.—State Highway Dept., Jefferson City, Mo.; construct 18 mi. Fulton-Jefferson City road; Federal-Aid Project 97; bids until Oct. 22.

Mo., Kennett.—State Highway Dept., Jefferson City, Mo.; construct 8.62 mi. Dexter-Madden-Kennett road, 24 ft. wide; Federal-Aid Project 26; J. E. Crane, Contr., Murphysboro, Ill.

Mo., Keytesville.—State Highway Dept., Jefferson City, Mo.; construct 1.13 mi. State road, Section 1, Project 8; .6 mi. State road, Section 2; bids until Oct. 13.

Mo., Richmond.—Ray County Commrs.; construct 2 mi. road; grading and concrete work; \$23,000; A. J. Lingley, Engr., St. Joe, Mo.; W. A. Ross, Contr., Kansas City, Mo. (Lately noted inviting bids.)

N. C., Ashboro.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.; construct 9.64 mi. State Highway; 25,310 cu. yds. topsoil surfacing; Federal-aid Project 125-A; bids until Oct. 12; W. S. Fallis, State Highway Engr., Raleigh. (See Machinery Wanted—Road Construction.)

N. C., Franklin.—Dist. Engr., Bureau Public Roads, U. S. Dept. Agriculture, Washington, D. C.; construct 20.9 mi. Three States National Forest road; graded earth, 16 ft. wide; project within Natahala Forest, Counties of Rabun (Ga.), Macon (N. C.) and Oconee (S. C.); \$26,000 available; Wright & Nave, Contrs., Asheville, N. C.; Vernon M. Peirce, Dist. Engr., Washington, D. C. (Lately noted inviting bids.)

N. C., Jefferson.—Ashe County Commrs., J. G. Bright, Highway Engr.; construct 6.03 mi., 42,523 sq. yds., water-bound macadam, bituminous macadam or gravel paving; 2.03 mi. 16 ft. wide and 4 mi. 10 ft. wide; bids until Oct. 20. (See Machinery Wanted—Road Construction.)

N. C., Pittsboro.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.; construct 21.82 mi. State Highway; Federal-aid Project 99-B; 57,320 cu. yds. topsoil surfacing or 57,320 cu. yds. gravel surfacing or 57,320 cu. yds. artificial sand-clay surfacing; bids until Oct. 12; W. S. Fallis, State Highway Engr., Raleigh. (See Machinery Wanted—Road Construction.)

N. C., Sparta.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.; construct 21.62 mi. State Highway; Federal-aid Project 99-B; 57,320 cu. yds. topsoil surfacing or 57,320 cu. yds. gravel surfacing or 57,320 cu. yds. artificial sand-clay surfacing; bids until Oct. 12; W. S. Fallis, State Highway Engr., Raleigh. (See Machinery Wanted—Road Construction.)

N. C., Winston-Salem.—City; construct 7000 sq. yds. warrenite-bitulithic pavement on macadam foundation; Atlantic Bitulithic Co., Contr., Richmond, Va.

Okla., Alva.—City; pave 16 blocks; \$150,000;

contemplated; Johnson & Benham, Consit. Engrs., Kansas City, Mo.

Okla., Afton.—City; pave Federal highway through Afton, connecting Ottawa with Craig County; voted bonds. Address The Mayor.

Okla., Miami.—City; pave Third Ave. between Main and H Sts.; A. R. Young Construction Co., Contrs.

S. C., Anderson.—Anderson County Highway Comsn.; construct 8.414 mi. Belton to Anderson road; bridges; 54,000 cu. yds. grading; 35,000 cu. yds. topsoil; \$80,000 available; Phillips Co., Contr.; W. A. Sanders, Engr. (Lately noted inviting bids.)

S. C., Greenville.—Greenville County Supvrs., W. H. Williamson, Supvr.; construct 2.12 mi. Piedmont Highway between city limits and Jones' Store; South Carolina Federal-Aid Project 98; 43,556 sq. yds. cement concrete and bituminous concrete surfacing; bids until Oct. 12; L. M. Weisiger Div. Engr., Laurens, S. C. (See Machinery Wanted—Road Construction.)

S. C., Laurens.—Laurens County Highway Comsn., J. D. Watts, Supvr.; construct 9 mi. Dixie highway, Princeton to Ware Shoals; \$40,000; N. C. Hughes, Engr.; J. M. Gregory, Contr. (Lately noted inviting bids.)

Tex., Eldorado.—Schleicher County Commrs.; construct 11.51 mi. water-macadam road, 16 ft. wide; \$230,000 available; R. Stevenson, Engr.; C. A. Womack agent for county; has bid for work and will sublet to reliable contractor. (Lately noted inviting bids.)

Tex., Galveston.—City; repair streets; 9000 cu. yds. mudshell; Hanson Sons, Contrs.

Tex., Greenville.—Hunt County Commrs.; grade, surface and build bridge and culverts on 11.4 mi. Highway 1 from Concord to Collin County; Federal-Aid Project 171; construction by day-labor.

Tex., Hereford.—Town; macadamize 3d or 4th St.; Henry Exall Elrod Engineering Co., Engrs., Dallas, Tex.

Tex., Highland Park (P. O. Dallas).—City, H. R. Davis, Mayor; pave Lexington and Gillow Aves.; \$110,000 available; Uvalde Paving Co., Contr., Dallas; Myers & Mays, Engrs., Dallas. (Lately noted.)

Tex., Houston.—City; pave Morris St.; Gouch & Holligher, Contrs.

Tex., McKinney.—Collin County Commrs.; construct roads in Copeville and Lavan Dists.; voted \$24,000 and \$60,000 bonds.

Tex., Paris.—Lamar County Commrs., W. L. Hutchison Judge; improve State highways Nos. 5 and 19; let contract Smith Bros. & Healy Construction Co., Dallas, Tex., at \$132,000 to grade 23 mi. Highway No. 5 and 25 mi. Highway No. 19; to A. D. McLain Co., Houston, Tex., at \$135,000 for concrete drainage structures; rejected bids for surfacing. (Lately noted inviting bids.)

Tex., Paris.—Lamar County, W. L. Hutchin, Judge; grade and construct drainage structures on 52 mi. road, Highways 5 and 19; contracts let; W. M. Fooshee, County Engr. (Lately noted inviting bids.)

Tex., San Antonio.—City; pave Camp, Burleson, Cherry, Travis and other streets and avenues; \$288,800; Southwest Bitulithic Co., Contr., 711 Gunter Bldg.; Hans Helland, City Engr. (Superseded recent item.)

Tex., San Antonio.—Bexar County Commrs., J. R. Davis, Judge; grade, surface and drain 6.2 mi. Highway 9; 58,211 sq. yds. bituminous macadam; bids opened Oct. 2; C. E. Hoff, Engr.

Tex., San Benito.—City; pave 4 blocks; will open bids. Address The Mayor.

Tex., Seguin.—Guadalupe County Commrs., J. B. Williams; surface 3.256 mi. Meridian Highway 2; bids opened Oct. 5; Hess & Skin-

ner, Engrs., Southwestern Life Bldg., Dallas, Tex.

Tex., Victoria.—Victoria County Commrs.; shell 4½ mi. road; Miller Construction Co., Contr., Houston, Tex.

Tex., Waco.—City Commrs., W. J. Neale; construct roads, water system, swimming pool, etc.; vote on \$65,000 bonds.

W. Va., Beckley.—Raleigh County Commrs.; plant and drain 4½ mi. Jarrold Valley-Contcord road; \$100,000 available; Sutton Construction Co., Contr., Pikesville, Ky.

W. Va., Moundsville.—Marshall County Commrs., J. E. Chase, Clk.; grade and drain 2½ mi. Round Bottom road in Clay Dist.; 6 mi. Bowman Ridge road in Meade Dist.; bids opened Oct. 8. (See Machinery Wanted—Road Construction.)

SEWER CONSTRUCTION.

Mo., Excelsior Springs.—City; build disposal plant and main sewer; vote Oct. 4 on \$25,000 bonds; Shockley Engineering Co., Engr., Kansas City, Mo.

Mo., Grant City.—City, Ed. Kelso, Mayor; construct sanitary sewer system, main sewers, main outfall sewer and sewerage-disposal works in Dist. No. 1; 4005 lin. ft. 6 to 12-in. deep trench; lay 3981 lin. ft. 8 to 10-in. vitrified sewer pipe with 42 Y branches; manholes; 129 cu. yds. excavations in Imhoff tank and sludge filter, etc.; rejected bids received Sept. 21; Black & Veatch, Engrs., 701 Mutual Bldg., Kansas City, Mo. (Lately noted inviting bids.)

Mo., Joplin.—City; construct sanitary sewers; \$291,000; 111,229 ft. 8 to 30-in. pipe; 287 manholes; 57,000 cu. yds. earth excavation; 430 cu. yd. concrete; S. B. Ashcraft, City Engr. (Previously noted voted bonds.)

Mo., Springfield.—City; construct sewers; \$40,000; lay 24,000 ft. 8-in. vitrified pipe; W. C. Culler, Engr.

N. C., New Holland.—North Carolina Farms Co., New Holland, and care Benham & Richards, Columbus, Ohio; install sewer, water and electric lighting systems; \$50,000; H. E. Miller Construction Co., Contr., Columbus, Ohio. (Previously noted bids until Sept. 10.)

Okla., Ada.—City Commrs.; construct sanitary lateral sewers in Dists. Nos. 11 and 12; bids until Oct. 19; Johnson & Benham, Consit. Engrs., Firestone Bldg., Kansas City, Mo. (See Machinery Wanted—Sewers.)

Okla., Spiro.—City; construct 8 to 10-in. vitrified sanitary sewers and sewerage disposal plant; vote Nov. 4 on \$50,000 bonds. Address The Mayor.

Okla., Wynona.—City, M. B. Prentiss, Mayor; construct sewer and water systems; vote on \$250,000 bonds; contract let.

Tex., Dallas.—City Commrs.; construct storm sewer in Lamar St. from Young to Powhattan Sts.; \$29,665; Cramer & Cullom, Contrs.

SHIPBUILDING PLANTS.

N. C., Wilmington.—Marine Railway.—Stone Towing Co.; construct \$60,000 marine railway; foundation 400 ft. long; cradle 250 to 300 ft.; capacity to haul 2000 tons; erect machine and woodworking shops.

Tex., Clinton.—Steel Vessels, etc.—Gray Engineering Works, H. Gray, Prest., Galveston, Tex.; leased marine ways; remodel to build ships up to 250 ft.; build 2500-ton drydock; later build 10,000-ton drydock; install floating machine shop; build small-tonnage vessels, including tugs, tankers, barges and steel steam vessels.

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Md. Cumberland—Artificial Silk.—American Cellulose & Chemical Mfg. Co., 681 5th Ave., New York; establish additional plant; 7000 sq. yds. floor space; mfrc. artificial silk.

N. C., Davidson—Cotton Yarn.—Linden Mfg. Co.; increase capital from \$100,000 to \$500,000.

S. C. Mt. Carmel—Rope and Towels.—L. L. Hester; install mech. to mfrc. rope or towels; has 2-story 40x40-ft. brick building; develop 400 H. P. water-power.

Tex., Cuero—Cotton Products.—Guadalupe Valley Cotton Mills; increase capital from \$125,000 to \$270,000.

Tex., Dallas—Hosiery.—Texas Hosiery Mills, J. C. Dodson, V.-P. and Mgr., 1407 S. Ervy St.; establish plant; construct dyehouse; install 100 knitters, 115 ribbers, 20 loopers; 35 H. P. electric power; daily capacity 1400 doz. pairs children's hosiery. (Lately noted organized, capital \$100,000.)

Tex., San Antonio—Chambrays Lone Star Cotton Mills organized; H. Bruhn, Prest.; has 250x75-ft. brick building; install 10,000 spindles and 300 looms; purchased \$300,000 mech.; electric power; daily capacity 15,000 yds. chambrays; Gregg & Co., Archts.-Engrs., Newark, N. J. and San Antonio. (Lately noted incptd., capital \$1,300,000, to convert brewery plant.) (See Mech. Wanted—Machine Shop Equipment.)

Tex., Stamford—Cotton Products.—W. K. Whipple, O. P. Harlan; incorporate company; capital \$1,000,000; build cotton mill; 10,000 spindles.

Telephone Systems.

Oka., Delaware.—Jenkins-Newcomb Telephone Co. incptd.; George Jenkins, Solomon Newcomb, Ernest Brannan.

Tenn., Knoxville.—People's Telephone & Telegraph Co.; increased capital from \$120,000 to \$150,000.

Water-Works.

Ark., Fort Smith—City, Arch Monroe, Mayor; improve water-works; \$200,000; construct 47x30-ft. brick and concrete boiler-house; install 3000-gal. filter, 8000-gal. daily capacity pump; W. Kiersted, Engr., 701 Mutual Bldg., Kansas City, Mo.; contract let; also install four 3,250,000-gal. daily capacity filter units, two 300 H. P. water-tubular boilers, 8,000,000-gal. daily capacity centrifugal pump, 8,000,000-gal. daily capacity high-pressure pumping engine. (Lately noted to improve water-works.)

Ky., Nicholasville—City; purchase water plant; vote in Nov. on \$36,000 bonds. Address The Mayor.

Ky., Crowley City—City; construct water, light, power and gas plants; vote on \$500,000 bonds. Address The Mayor.

Oka., Strong City—City; plans construction water-works; \$40,000; H. G. Olmstead & Co., Engrs., 415 Oil Exchange Bldg., Oklahoma City; vote Nov. 4 on \$460,000 bonds. (Lately noted to vote Sept. 15.)

Oka., Vinita—City; construct 2 concrete dams, 5 mi. pipe line, purification plant, tower and intake; H. G. Olmstead & Co., Engrs., 415 Oil Exchange Bldg., Oklahoma City; vote Nov. 4 on \$460,000 bonds. (Lately noted to vote Sept. 15.)

Oka., Wynona—City, M. B. Prentiss, Mayor; construct water and sewer systems; vote on \$250,000 bonds; contract let.

N. C., New Holland—North Carolina Farms Co., New Holland and cave Benham & Richard, Columbus, O.; install water, sewer and electric-lighting systems; \$50,000; H. E. Miller Contracting Co., Contr., Columbus, Ohio. (Lately noted bids until Sept. 10.)

Tex., Moran—Albany Light & Stone Quarry Co., Albany, Tex.; install water-works; \$90,000; dam Deep Creek for water reserve; construct high-power electrical transmission line from Albany.

Tex., Waco—City Comr., W. J. Neale, E. W. Marshall; install water system; construct roads and swimming pool; install moving pictures, etc., at Wm. Cameron Park; vote on \$65,000 bonds.

Va., Norfolk—City, Mr. Ashburner, Mgr.; construct dam, spillway and roads at Lake Prince reservoir; \$573,456.60; Dabney H. Maury, Consul. Engr., 1445 Monadnock Block, Chicago, Ill.; Sanford & Brooks Co., Contr., Commerce and Water Sts., Baltimore, Md. (Lately noted bids until Sept. 21.)

Woodworking Plants.

Ala., York—Veneer.—W. F. Hays, T. E. Sells; both Birmingham, Ala.; interested in establishing veneer mill.

Ga., Macon—Boxes.—Macon Box Co. organized; B. B. Taylor, Mgr.; has building; \$25,000 mech. purchased; daily capacity 10,000 ft. (Lately noted incptd., capital \$25,000.)

Ky., Louisville—Baseball Bats.—Hillion Col-Ins Co., L. V. Cassilly, Prest., 1300 Twelfth St., erect \$50,000 plant addition; purchased 8-acre site; mfrc. baseball bats. (Lately noted to increase annual capacity from 100,000 to 300,000.)

La., Vidrine—Boxes.—Columbia Box Factory incptd.; capital \$25,000.

Md., Baltimore—Collapsible Barrels.—Nest-A-Drum Co., 1231 Calvert Bldg. incptd.; Wm. Howard Hamilton, Walter H. and Richard W. Cook.

Mo., Springfield—Veneer.—Springfield Furniture Co., Burke Holbrook, Secy.; erect 1-story 50x75-ft. veneer shed; frame skeleton; iron-clad; gravel roof; \$3000; construction by owner. (Lately noted to erect shed.)

Tex., Houston—Furniture.—Kost Furniture Co. incptd.; capital \$6000; Philip and J. L. Kost, Barnett Gershon.

Va., Portsmouth—Wagons.—E. P. Lindsay (lately noted to rebuild burned plant); erect 1 story 60x100-ft. building; construction by day labor; install motors, rip saw, planer, band saw, sanding and mortising machines, belting, drills, etc. (See Machinery Wanted—Woodworking Machinery; Motors; Forge; Drills; Belting.)

W. Va., Weston—Furniture.—Geffner Furniture Co. incptd.; capital \$50,000; Myer Wiesenthal, Harry Sharper, Arthur S. Guggenheim; all Pittsburgh, Pa.

Fire Damage.

Ala., Birmingham—Caraway Grocery Co., C. J. Hilton Grocery Co., Franklin Grocery Co. and Sunnyside Grocery Co.'s stores; T. H. Smith's, Mrs. A. B. McClellan's and W. B. Thompson's dwellings; loss \$70,000 to \$75,000.

Ark., Alpena Pass—J. H. Ragland's flour and grist mill.

Ala., Vinegar Bend.—Bank of Washington County; Vinegar Bend Lumber Co.'s store and office building; J. W. Porter's drug store, Methodist Church (address The Pastor); loss \$75,000.

Ga., Bainbridge—Empire Cotton Oil Co.'s plant.

Ga., Chalybeate Springs Hotel; owned by Jno. A. Varlton; loss \$25,000.

Ga., Columbus.—R. J. Jones' meat market, 3165 River Rd.

Ga., Millen.—R. Y. Lane's turpentine still and naval stores plant; loss \$3500.

Ky., Owensboro.—W. F. Reinhardt's building occupied by Mrs. J. L. Daman; Chas. Gipe's store owned by Mrs. Margaret Brodie; building occupied by B. Salinger and R. B. O'Bryan, owned by Harmon Miller, Asheville, N. C. and Mrs. O. H. Haynes, Owensboro; R. C. Hardwick's store owned by Mrs. Jessie Sweeney Erwin, Kansas City; loss \$150,000.

Ky., Pleasureville.—Joseph Gividen's grist mill and machine shop; loss \$5000.

La., Covington—Wallace Pool's 3 buildings; Marion Pool's building; Herbert Grocery Co.'s store; loss \$17,500.

Miss., Meadville.—E. H. Butler's saw mill; loss \$40,000.

Mo., St. James.—Nicholas & Owens' store.

N. C., Greensboro.—Sam Walker's residence, Gregor St.

N. C., King.—Jasper Cromer's residence.

N. C., Raleigh.—State Hospital for Insane's laundry building; loss \$100,000.

N. C., Wadesboro.—E. A. and W. W. Morgan's grocery; loss \$10,000 to \$12,000.

N. C., Walkertown.—Booe & Ogburn's flour mill; loss \$60,000.

S. C., Orangeburg.—M. O. Dantzler's building, occupied by Tyler Bros.

S. C., Timmonsville.—Atlantic Coast Line R. R.'s freight depot; loss \$25,000; J. E. Whiloughby, Ch. Engr., Wilmington, N. C.

Tenn., Chattanooga.—Byron E. Tatum's residence and an adjoining cottage, Missionary Ridge; loss \$25,000.

Tenn., Memphis.—Sazerac Hotel; owned by Mrs. Elmer E. Houk and J. W. Messick; loss \$75,000.

Tex., Biardstown.—Dr. J. E. Armstrong's house, near Biardstown.

Tex., Hughes Springs.—City Cafe; City Barber Shop; Perkins Vulcanizing Plant.

Tex., Ranger.—J. B. Ames' residence.

Tex., Ysleta.—Two barracks at military camp. Address Construction Quartermaster.

W. Va., Charleston.—Pugh Furniture Co.'s

W. Va., New Martinsville.—New Martinsville Glass Mfg. Co.'s plant; loss \$50,000 to \$60,000; building, owned by Harrison B. Smith; loss \$110,000.

Damaged by Explosion.

Ky., Garrett.—Bolen Hotel; \$20,000. Address The Proprietor.

BUILDING NEWS**EXPLANATORY.**

Buildings costing less than \$10,000 not covered in these reports.

BUILDINGS PROPOSED**Apartment-Houses.**

Ala., Birmingham.—South Highlands Investment Co.; erect 20-room brick apartment-house, 2317 Eighth Ave., North.

D. C., Washington.—Harry Wardman, 1430

K St. N. W.; erect \$600,000 apartment-house, Connecticut Ave. and Woodley Rd. N. W.; 7 stories.

Fla., St. Petersburg.—J. J. West, 526 Fifth Ave. S.; erect \$5000 apartment-house. (See Dwellings.)

Mo., St. Louis.—Charles Neustadt; convert West End Hotel, West Belle Pl. and Vandeventer Ave., into apartment-house or family hotel.

Mo., St. Louis.—Jacob Rubin, Sawyer Bldg.; erect 9 six-suite apartment-houses, University Drive; \$35,000 each; 2 stories; 32x67 ft.; brick; semi-fireproof; O. J. Bopp, Archt., Odd Fellows Bldg.; day work.

S. C., Columbia.—Mrs. Frank Sims; erect \$24,000 brick veneer apartment-house, 1418 College St.

Tex., Dallas.—E. B. Chenoweth; erect two 4-room apartments, 5604 Columbia Ave.

Va., Danville.—T. T. Adams; convert residence, Main St., into 4-suite apartment-house.

Va., Norfolk.—Vuedelean Apartment Corp., Laurence Waring, Prest., Arthur C. Gray, Secy.; erect \$700,000 apartment-house, Olney Rd. and Stockley Gardens; 11 stories; 60 apartments; brick and steel; elevators and dumbwaiters; restaurant, Laundry, etc.; 2 stores on first floor; Philip B. Moser, Archt., Law Bldg.; Fannin & Quinn, low bidders for construction. (Lately noted.)

W. Va., Welch.—J. W. Blakely; erect \$40,000 apartment building; 3 stories and basement; 44x90 ft.; stucco and brick.

Association and Fraternal.

Ala., Birmingham.—Young Men's Hebrew Assn., Simon Klotz, Prest.; erect \$20,000 club-house, 7th Ave. and N. 18th St.

Fla., Jacksonville.—Knights of Pythias; erect \$35,000 building; 3 stories; hollow tile.

Ky., Blackey.—Elk Creek Coal Co.; erect Y. M. C. A. (See Dwellings.)

Fla., Wauchula.—Ancient Free and Accepted Masons; plans to erect 3-story Building, Main St.

Ky., Owensboro.—Knights of Columbus, W. F. Rapier, Grand Knight; erect \$50,000 addition; auditorium, swimming pool, gymnasium; brick and concrete; A. Killian, Archt., 519 St. Ann St. (Lately noted.)

Mo., Springfield.—Knights of Pythias, W. B. Linney, Grand Inner Guard; erect dormitory and other departments at Pythian Home; \$150,000.

Okla., Enid.—Enid Masonic Temple Association, J. J. Allen, Clk.; bids until Nov. 15 to erect Masonic Temple; independent bids will be received for plumbing and heating, electric wiring, marble and tile work, roof without sheet-metal work, and painting; plans and specifications at office of R. W. Shaw, Archt., Beck Bldg., and office of Mr. Allen. (Previously noted.)

Okla., Okemah.—Masonic Lodge, N. D. Dosey, Prest.; erect \$25,000 temple; 3 stories and basement; 48x96 ft.; brick, stone and terra-cotta; built-up roof; steam heat; oak floors; A. C. Davis & Son, Archts., Shawnee.

Okla., Hartshorne.—Masonic Lodge; plans to erect \$100,000 temple; 3 stories; 70x100 ft.; brick, concrete and steel; concrete foundation.

Okla., Tulsa.—Salvation Army; plans to erect woman's boarding home.

Okla., Tulsa.—Tulsa Masonic Building Assn., B. A. Hooper, Prest.; erect \$500,000 temple; 100x140 ft.; structural steel; tile roof; concrete, wood-block and hardwood floors; hollow fireproof tile; ornamental terra-cotta; safes; interior tile; vaults, wire glass; vault lights; ventilators; steel and sash trim; R. G. Schmid & Co., Archts., 154 N. Randolph St., Chicago. (Lately noted.)

S. C., Columbia.—Ancient Free and Accepted Masons; erect \$250,000 building, Lady and Sumter Sts.; 6 stories; auditorium, lodgerooms, etc.

Tex., Denison.—Knights of Columbus; erect 2 or 3-story lodge, Woodward St.

Tex., El Paso.—American Legion Post; plans to erect \$250,000 clubhouse; 6 or 8 stories; offices, gymnasium, swimming pool, etc.

Tex., Temple.—Y. M. C. A.; expend \$50,000 to enlarge and erect additions to building.

Va., Danville.—Masonic Building Corp.; bids until Oct. 11 to erect \$450,000 Masonic Temple and office building, Main and Union Sts.; 10 stories; 66x124 ft.; steel frame; hollow fireproof tile; ornamental terra-cotta; interior tile; tar and gravel roof; composition, tile and marble floors; metal doors; wire glass; steel sash and trim; vault lights; mail chutes; steam heat; electric lights; 2 high-speed electric elevators; F. F. Farris, Archt., Wheeling, W. Va. Address A. B. Carrington, Prest., Danville. (Lately noted.)

W. Va., Huntington.—Masonic Lodge, Frank Burks, Secy.; remodel Lewis building for club; restaurant, gymnasium, writing-rooms, restrooms, etc.

W. Va., Welch.—American Legion; remodel building for memorial; 35x10 ft.; brick; \$25,000; Alex. N. Mahood, Archt., Bluefield.

Bank and Office.

Ark., Little Rock.—Union & Mercantile Trust Co., E. J. Bodman, V.P. and Secy.; erect \$250,000 bank building, 4th and Main Sts.; stone; interior, marble; 50x140 ft.; 2 stories; ceiling to ground floor, 40 ft. high; safety-deposit vaults on mezzanine floor; fireproof; tar and gravel roof; vacuum heating; electric lighting; electric passenger elevator; hollow fireproof tile; interior tile; metal doors; vaults; wire glass; concrete floors; vault lights; ventilators; Thompson & Harding and Mann & Stern, Archts.

Fla., Jacksonville.—Good Hope Water Co., Dr. E. H. Armstrong, Prest.; erect office building and warehouse; 36x60 ft.; 2 stories; brick; composition roof; cement floors; metal ceilings; mail chutes; \$10,000; bids opened about Oct. 20; install freight-handling mech.; also build docks. Address Fred Lang.

Ga., Atlanta.—R. N. Berrien, Jr. & Co.; remodel building, 15 Peachtree St.; 1st floor, stores; 2d and 3d floors, 16 offices.

La., Poydras.—Leon Jacobs; convert stores, Baronne and Poydras Sts., into office building.

Fla., Winter Haven.—Snell Natl. Bank; remodel and erect addition to building; \$20,000; 18x85 ft.; 2 stories; brick and frame; Johns-Mansville roofing; tile and wood floors; F. H. Trimble, Archt., Orlando; bids opened about Oct. 9.

Md., Baltimore.—United States Fidelity & Guaranty Co.; erect fireproof office building, Calvert and Mercer Sts.; erect 4 stories at present of 12-story building; 40x115 ft.; slag roof; cement and composition floors; elevator and pavement lift; Wyatt & Nolting, Archts., Keyser Bldg.; among contractors estimating are Hughes-Foulkrod Co., Commonwealth Trust Bldg.; Standard Construction Co., 1713 Sansom St.; Irwin and Leighton, 126 N. 12th St.; all Philadelphia; Drummond-Miller Co., 4500 Euclid Ave., Cleveland, O.; Underpinning & Foundation Co., 290 Broadway; Tompson-Starrett Co., 138 W. 32d St.; both New York; Price Construction Co., 209 Maryland Trust Bldg.; Consolidated Engineering Co., 243 Calvert Bldg.; Chas. L. Stockhausen Co., Gay and Water Sts.; B. F. Bennett Building Co., 123 S. Howard St.; Cogswell-Koether Co., 406 Park Ave.; Hicks, Tase & Norris, 109 W. Madison St.; Morrow Bros., 1201 Fidelity Bldg.; J. Henry Miller, Inc., Eutaw and Franklin Sts.; H. D. Watts Co., Garrett Bldg.; West Construction Co., American Bldg.; Geo. A. Fuller Co., American

Bldg.; Claiborne, Johnston Co., Garrett Bldg.; Henry Smith & Sons Co., 7 E. Redwood St.; all Baltimore; bids until Oct. 21. (Previously noted.)

Md., Baltimore.—First Mortgage Bond and Homestead Association, 213 N. Calvert St.; erect \$20,000 office building; 3 stories, basement and cellar; 24x58 ft.; brick and mill construction; tin roof; oak floors; hot-water heat; electric lights; metal ceilings; interior tile; wire glass; F. E. Beall, Archt., 1335 N. Gilmor St.; considering bids. Address O. Parker Baker, 213 N. Calvert St.

Mo., Kansas City.—Produce Exchange Bank; expend \$60,000 to remodel building, Missouri Ave. and Walnut St.; marble floors; remodel heating and lighting plant; A. B. Anderson, Archt., 818 N. Y. Life Bldg.; Mosler Safe Co., Hamilton, O., vault fixtures. (Lately noted.)

Tex., Dallas.—Dallas County Medical Association, Dr. C. M. Rosser, Chrmn. Comm.; considering erecting doctors' building.

Tex., Denison.—State Natl. Bank of Denison; reported to erect \$450,000 bank and office building, Main St.; 7 stories; 100x110 ft.

Va., Staunton.—Natl. Valley Bank, J. C. Foster in charge of Trust Dept.; erect building.

Churches.

Ark., Subiaco.—Benedictine Fathers; erect \$300,000 church; 1 story; 52x224 ft.; stone and marble; Ludwig & Dreisener, Archts., 1736 Waverly Pl., St. Louis, Mo.

Fla., Pensacola.—Knox Presbyterian Church, Rev. W. E. McIlwain, Pastor, and Chrmn. Bldg. Comm.; erect building.

Ga., Crawfordville.—Presbyterian Church; erect \$15,000 church and Sunday-school rooms; brick, granite trim; hardwood floors; furnace heat; C. H. Golucke & Son, Archts. (Lately noted.)

Ga., Crawfordville.—Methodist Church; erect \$15,000 church and Sunday-school rooms; brick, granite trim; hardwood floors; furnace heat; C. H. Golucke & Son, Archts.

Ga., Atlanta.—Third Baptist Church; erect \$40,000 building, 446 Luckie St.; brick; 2 stories and basement; 52x106 ft.; N. S. Hamilton, Archt.

Ky., Blackey.—Elk Creek Coal Co.; erect church. (See Dwellings.)

Ky., Frankfort.—Christian Church, Rev. Roger Nooe, Pastor, W. G. Furr, Chrmn. Comm.; erect \$100,000 building.

Md., Baltimore.—Chizuk Amuno Congregation, McCulloh and Mosher Sts.; erect synagogue, Eutaw Pla. and Chauncey Ave.; stone and brick; 85x120 ft.; \$40,000; Jos. Evans Sperry, Archt., Calvert Bldg.; basement only to be constructed at present; bids until Oct. 11; following contractors estimating: Chas. L. Stockhausen Co., Gay and Water Sts.; Consolidated Engineering Co., Calvert Bldg.; R. B. Mason, 308 W. Madison St.; Gladfelter & Chambers, 36th St. and Roland Ave.; Franie Bros. & Haigley, 18 Clay St.; J. L. Robinson Construction Co., 1130 W. Lafayette Ave.

Miss., Meridian.—Fifteenth Ave. Baptist Church, Rev. E. E. Huntsberry, Pastor; erect building.

Mo., Independence.—First Christian Church; remodel interior of building; 2 stories and basement; 100x100 ft.; J. H. Felt & Co., Archts., 800 Grand Avenue Temple Bldg., Kansas City.

Mo., St. Louis.—St. James Evangelical Church, Rev. T. Barnum, Pastor, 1511 College Ave.; erect addition to parsonage; 9x40 ft.; brick; tar and gravel roof; yellow pine floors; hot-water heat; ornamental terra-cotta; interior tile; Otto J. Boehmer, Archt., 3500 Palm St.; sublet contracts. (Lately noted.)

Mo., Zepher Hill.—Christ Evangelical Church, Rev. J. Varwig, Pastor; erect \$12,000 building; 1 story; 28x37 ft.; brick and stone trim; composition roof; yellow pine floors; furnace heat; day work.

Okla., Frelerick.—Church, Rev. C. J. Kimber, Pastor; considering erecting \$40,000 building; 2 stories and basement; brick and stone trim; composition roof.

Okla., Holdenville.—Methodist Church; erect \$100,000 building. Address The Pastor.

Okla., Marietta.—Baptist Church; plans to erect brick building. Address The Pastor.

Okla., McCracken.—Church, Rev. Father O'Brien, Pastor; erect \$25,000 building; 1 story; 40x90 ft.; native stone; asphalt shingle roof; yellow pine floors; furnace heat; H. W. Brinkham, Archt., Emporia, Kan.

Okla., Perry.—Church, Rev. Father Willeboard, Pastor; erect \$60,000 building; 1 story; 50x125 ft.; brick; stone trim; asbestos shingle roof; yellow pine floors; furnace heat; H. W. Brinkham, Archt., Emporia, Kan.

Okla., Perry.—First Presbyterian Church; erect \$30,000 building; 1 story and basement; 50x84 ft.; stucco and hollow tile; asphalt shingle roof; concrete floors; Butler & Saunders, Archts., Tulsa.

Okla., Tulsa.—Boston Avenue M. E. Church, Rev. L. S. Barton, Pastor; plans to erect building.

S. C., Spartanburg.—First Presbyterian Church, J. Choice Evins, Chrmn. Comm.; erect

Tenn., Centerville.—Methodist Episcopal Church, Rev. C. R. Wade, Pastor; J. B. Walker, Chrmn. Bldg. Comm.; erect \$30,000 building.

Tenn., Chattanooga.—Tompkins Chapel, A. M. E. Zion Church, Rev. F. D. Douglas, Pastor, 904 E. 8th St.; erect \$12,000 church and home for girls, Flinn and Palmetto Sts.

Tex., Fort Worth.—Church of the Nazarene, Rev. E. M. Murrill, Pastor; erect building.

Tex., Terrell.—First Baptist Church; improve basement and install number Sunday-school rooms. Address The Pastor.

Va., Monroe.—First Baptist Church; plans to erect \$35,000 building. Address the Pastor. Brinkman, Archt., Emporia, Kan.

Va., Winchester.—Church of Disciples of Christ, G. W. Riley, Chrmn. Comm.; erect building.

City and County.

Fla., Lake Worth—Casino.—City Comms.; issue \$100,000 bonds to erect bathing casino.

Okla., Walter—City Hall.—City, W. B. Anthony, Clk.; vote on \$20,000 bonds to erect city hall.

La., New Orleans—Sheds and Wharves.—Dock Board, W. O. Holland, Prest., 200 New Court Bldg.; erect half mile of sheds, to include covering open wharf at Louisiana Ave., 140 ft.; 8th St. wharf, 560 ft.; 4th St. wharf, 500 ft.; extend 1st St. shed, 160 ft.; also build Clout St. and Bartholomew St. wharves.

Md., Baltimore—Police Station.—Police Commissioner, Josiah A. Kinsey, Secy., Room 13, Courthouse; bids until Oct. 6 for alterations and additions to Eastern Police Station, Bank and Bethel Sts.; plans and specifications at office of Commr.

Okla., Okmulgee—Library.—Library Board, City Hall; erect \$65,000 library; 1 story; brick; stone trim; composition roof; yellow pine floors; Smith, Rea, Lovitt & Senter, Archts. (Previously noted.)

Courthouses.

N. C., Smithfield.—Johnston County Commissioners; erect \$500,000 courthouse; 4 stories; fireproof; Indiana limestone and granite; in-

terior, marble wainscoting and ornamental plaster; electric lights; first floor, offices; second, courtroom, lawyers' rooms, etc.; third, county officials' rooms; fourth, jail; bids received until Oct. 25 by Harry Barton, Archt., Greensboro, N. C. (Lately noted.)

Dwellings.

Fla., Bradenton.—Sam Knight; erect bungalow.

Fla., Clearwater.—A. B. Carter; erect 2 dwellings; 1 story; frame; composition roofs; 5 and 6 rooms.

Fla., Clearwater.—J. B. Paine; erect dwelling in Sunset Point.

Fla., Eustis.—Board of Trade; promoting organization of company to erect 25 to 50 bungalows.

Fla., Daytona.—Robert M. Bailey; purchased property at 38 Second Ave.; plans to develop; enlarge apartment-house and erect 2 bungalows on San Juan Ave. frontage.

Fla., Jacksonville.—James Greig, 215 11th St.; erect bungalow, College St.; 34x36 ft.; art stone; cement tile roof; hardwood pine oak and tile floors; plans and construction by owner. (Lately noted.)

Fla., Miami.—Jesse A. Mathers; erect 2-story concrete block residence, 107 Filer Ave.

Fla., Miami.—L. S. Julian; erect frame bungalow, Wood Ave.

Fla., Miami.—J. W. Bennett; erect 2 dwellings; concrete blocks.

Fla., St. Petersburg.—W. L. Sparks; erect 2-story residence.

Fla., St. Petersburg.—F. A. Myers; erect 6 bungalows, 4th St. and Tenth Ave., Colonial Heights; \$21,000; plans to erect number of dwellings.

Fla., St. Petersburg.—A. T. Squiers; erect bungalow, Locust St. and Thirteenth Ave., North; plans to erect number of dwellings.

Fla., Miami.—J. A. Sewell; erect 2 concrete-block dwellings.

Fla., St. Petersburg.—J. J. West, 526 5th Ave. South; erect 1-story concrete-block garage; 12x20 ft.; \$2500; apartment-house; 4 apartments of 3 rooms each; 28x30 ft.; concrete block; \$5000; 2-story residence; 16 rooms; 1st story concrete blocks; 2d, stucco; 21x36 ft.; pine floors; slate shingle roofing, 8x12 in.; \$6000; ready roofing for garage; day labor. (Lately noted.)

Fla., Tampa.—H. Stone; erect frame dwellings, 893-5-7 Rome Ave.; \$3800 each.

Fla., Tampa.—Tampa Bay Land Co., Jas. F. Taylor, Prest.; erect number bungalows, Palma Ceia Park.

Ga., Atlanta.—H. R. Fisher; erect 1-story brick-veneer dwelling; day labor.

Ga., Atlanta.—W. H. Mashburn; erect 1-story brick-veneer dwelling; day labor.

Ga., Crawfordville.—Glenn Taylor; erect frame residence.

Ga., Savannah.—D. J. Scott; erect 2-story dwelling.

Ky., Blackey.—Elk Creek Coal Co.; erect 50 miners' houses, church and Y. M. C. A.; contract let at once.

Ky., Harrodsburg.—Wm. Speiman; erect \$12,000 residence; 2 stories and basement; 34x34 ft.; E. Stampler, Archt., Fayette Natl. Bank Bldg., Lexington.

Ky., Mayking.—Mayking Coal Corp.; erect 12 miners' houses.

Ky., Owensboro.—R. E. Massic; erect dwelling; 2 stories and basement; 58x50 ft.; frame; C. W. Kimberlin, Archt., Odd Fellows' Bldg.

Ky., Owensboro.—R. L. Wildon; erect residence; 2 stories and basement; frame and stucco; J. Whitehead Archt. Masonic Bldg.

Ky., Owensboro.—Mrs. Mary M. Broeker; erect residence, Phillips Court.

La., Merverton.—Texas Oil Co.; erect number of operatives' houses.

Md., Baltimore.—James Keely, 1123 Poplar Grove St.; erect 10 2-story brick dwellings, 500-518 Loudon Ave.; \$20,000.

Md., Baltimore.—Northern Engineering & Construction Co.; erect two 2½-story frame dwellings, Alto Ave. and Denison St.; 26x32 ft.; asphalt slate roof; hot-air heat; F. E. Beall, Archt., 1335 N. Gilmor St.; construction by owner. (Lately noted.)

Md., Baltimore.—L. F. Gardner, 107 E. North Ave.; erect \$15,000 residence and garage; former 30x52 ft.; latter, 20x20 ft.; brick and concrete; asbestos slate roof; oak and pine floors; hot-water heat; electric lights; F. E. Beall, Archt., 1335 N. Gilmor St.; construction by owner, who may be addressed.)

Md., Baltimore.—Frank O. Singer, Jr., Harford Rd. and 25th St.; erect 2-story frame dwelling, Loudon and Bateman Aves.; 30x42.6 ft.; W. B. Gerwig, Archt., 600 Equitable Bldg.; construction by owner.

Md., Rockville.—International Shoe Heel Corp., A. K. Pomeroy, Prest., Philadelphia and Boston; erect number employees' dwellings.

Miss., Ellisville.—A. J. Yaretsky; erect residence.

Mo., Carrollton.—Carl Burger; erect dwelling; 2 stories and basement; 36x32 ft.; brick; stone trim; shingle roof; F. E. Scott, Archt., taking bids.

Mo., Kansas City.—C. R. Benton, 3218 Bellefontaine Ave.; erect residence; 1 story and basement; 20x20 ft.; frame; shingle roof; construction by owner.

Mo., Springfield.—Hall Reed; erect residence, Belmont and Fremont Sts.

Mo., St. Louis.—Mueller-Jones Building & Realty Co.; erect 3 dwellings, Forest Hill; 3 stories; 24x30 ft.; brick; construction by owner.

Mo., St. Louis.—Parker Saunders, Pierce Bldgs.; erect \$20,000 residence and garage; 2 stories; 30x12 ft.; hollow tile and stucco; W. H. Green, Archt., 1529 Chestnut Ave.

Mo., University City.—Balson Realty & Building Co.; erect number residences, University Square; California type.

N. C., Greensboro.—L. M. Clymer; erect residence, McGee St., between Brandwood Ave. and Edgeworth St.; 5 rooms; cement base, tile and stucco; Barber asphalt roof; hardwood floors; vapor heat, \$1000; city lighting; Weston & Simmons, Archts.; construction under supervision of owner, who purchases material.

Okla., El Reno.—Chamber of Commerce; promoting organization of company to erect dwellings; capital stock, \$20,000.

Okla., Oklahoma City.—R. M. Huffington; erect residence, 213 E. 15th St.

Okla., Oklahoma City.—Alma Cook; erect 2 dwellings, 1720-1724 W. 12th St.

Okla., Oklahoma City.—Oscar White; erect dwelling, 2023 W. 16th St.

Okla., Oklahoma City.—J. R. Hughes; erect dwelling, 425 E. 13th St.

S. C., Greenville.—E. Godfrey Webster; erect 2-story residence, Crescent Ave., Crescent Terrace.

Tenn., Paris.—Mrs. A. E. Rison; erect \$17,000 residence; 2 stories and basement; 68x60 ft.; brick veneer; G. Tandy Smith, Archt., Heart Bldg., Paducah, Ky.

Tex., Dallas.—Mrs. Sallie B. Stephens; erect 7-room frame airplane cottage, 5715 Goliad St.

Tex., Dallas.—Mrs. Nell Nall; erect 2-story brick-veneer residence, 5110 Gaston St.; \$18,000.

Tex., Dallas.—C. G. Teltner; erect 2-story 8-room brick-veneer residence, 3727 Gilbert St.; \$15,000.

Tex., Dallas.—W. A. Thomas; erect 5-room brick-veneer cottage, 3812 Avondale St.

Tex., Dallas.—G. W. Works; erect 6-room frame cottage, 5643 Willis St.

Tex., Dallas.—J. F. Zang; erect 1-story brick store, 1109 Zang St.

Tex., Dallas.—C. A. Olstetstead; erect 2-story 6-room residence and garage, 802 Zang St.

Tex., Dallas.—H. W. Ferguson; erect 2-story 8-room frame residence, 514 E. 6th St.

Tex., El Paso.—Duckett & Hutchens; erect 6 brick bungalows, Altura Park; \$18,000.

Tex., San Antonio.—Mrs. Sarah Miller; erect 6-room dwelling, Ashby Pl.

Tex., San Antonio.—L. W. Gillett; erect 5-room dwelling, Summitt Pl.

Tex., San Antonio.—Nims & Hyde; erect 4-room dwelling, Nims St.

Tex., San Antonio.—Mrs. Z. Hanson; erect 5-room dwelling and garage, Elmira St.

S. C., Timmonsville.—Imperial Tobacco Co.; erect 2 brick residences, Byrd St., for white employees and house for negroes.

Tex., Houston.—J. R. Braffett; erect 6-room cottage, 210 Stiles St.

Tex., San Antonio.—G. H. Roth; erect 5-room dwelling, Mulberry St.

Tex., San Antonio.—C. W. Feuermeyer; erect 4 dwellings, Matamoras St.; \$16,000.

Tex., San Antonio.—J. N. Ousset; erect 5-room dwelling, Courtland Ave.

Tex., San Angelo.—Clarence R. Webb; erect residence, Angelo Heights.

Tex., San Angelo.—C. C. McBurnett, St. Angelus Hotel; erect residence.

Tex., San Angelo.—J. E. Henderson, Jr., Rudd, Tex.; erect residence.

Tex., Sherman.—Sherman Mfg. Co.; erect number employees' residences.

W. Va., Huntington.—Wm. Kanef; erect \$18,000 residence, Washington Blvd., Ricketts' Place.

W. Va., Woodville.—Prue Coal Co., 108½ Capital St., Charleston, I. G. Williams, Prest. and Secy., Spring Hill; erect 45 miners' dwellings.

Government and State.

D. C., Washington—Office and Laboratory—Bureau of Yards and Docks, C. W. Parks, Navy Dept.; bids until Oct. 15 to erect building at Naval Experimental and Research Laboratory at Bellevue; Specification No. 4301.

Hospitals, Sanitariums, Etc.

Ala., Tuscaloosa.—State; erect institute for feeble-minded, Huntsville Rd., adjoining Alabama Insane Hospital; 3 buildings; \$200,000; ultimate plans call for 10 or 12 buildings; D. C. Whildin, Archt., Birmingham. (Lately noted.)

Ga., Augusta.—Dr. T. W. Josey and others; erect C. T. Walker Sanitarium, 12th St.; \$20,000.

Ga., Atlanta.—Piedmont Sanitarium; erect 2-story building; steel, tile and brick; day labor.

Okla., Bartlesville.—Washington County Commr.; plan to issue \$150,000 bonds to erect hospital; city considering similar issue to supplement county funds. Address The Mayor.

Tenn., Chattanooga.—Erlanger Hospital, Mercer Reynolds, Chrmn. Comm.; erect \$75,-

000 annex; brick; 3 stories; 125x60 ft.; J. D. Alsup, Archt.

Tex., Cisco.—City; votes Oct. 30 on \$60,000 bonds; purchase 3 schools; convert one into hospital; use others for schools. Address The Mayor.

Tex., Dallas.—Dallas County, Cecil Simpson, Judge, votes Nov. 2 on \$225,000 bonds for improvements to Parkland Hospital; city and county plan to erect \$450,000 addition; jointly.

Tex., Memphis.—Hall County; defeated hospital bonds. (Lately noted.)

Va., Lynchburg.—Marshall Lodge Memorial Hospital, Judge Frank P. Christian, Chrmn. Bldg. Com.; erect first unit of hospital; \$150,000.

Hotels.

Fla., Buena Vista.—C. F. Goodman; erect 60-room hotel; concrete block; beam and pilaster construction; 3 stories.

Fla., Fort Myers.—Mrs. W. B. Winkler; erect 20-room addition to Gulf Beach Hotel, Estero Island; concrete blocks.

Fla., Miami.—N. T. B. Roney; remodel lower floor Biscayne Hotel.

Fla., Ocala.—Citizens' Investment Co.; imprint Seminole Hotel.

Ga., Dawson.—Dawson Hotel Co., W. H. Locke, Secy.; bids until Oct. 10 to erect 40-room fireproof hotel; 3 stories; \$100,000; P. E. Dennis, Archt., Macon. (Lately noted.)

N. C., Hendersonville.—Claude Brown; reported to erect \$250,000 hotel.

S. C., Union.—Fairfax Harrison Hotel Co., L. M. Jordan, Secy.; Merchants and Planters' Bank; bids until Nov. 10 to erect building; plans and specifications at offices Mr. Jordan, Atlanta (Ga.), Builders' Exchange, and W. Douden, Archt., Union. (Lately noted.)

Tenn., Memphis.—Mrs. Elmer E. Houk and J. W. Messick; repair Sazerac Hotel noted burned at loss of \$75,000.

Miscellaneous.

Ark., Hot Springs—Bathhouse.—Woodmen of Union, J. L. Webb, Chrmn. Bldg. Comm.; erect \$100,000 bathhouse; 3 stories and basement; 95x120 ft.; brick and terra-cotta; W. T. Bailey, Archt., 358 Beale Ave., Memphis, Tenn. (Lately noted.)

Ark., Little Rock.—Little Rock Boys' Club; leased site rear of old Statehouse; erect fireproof building.

Fla., Key West—Clubhouse.—Domingo J. Miliord, Cuban Consul, Chrmn. Com.; bids until Oct. 9 to erect San Carlos Club and school buildings; plans and specifications at Ramon Perdome's residence, 22 Duval St.

Fla., Ocala—Bandstand.—Rotary Club, Dr. J. E. Chace, A. E. Gerig; erect bandstand; also construct tennis court, croquet grounds, etc.

Tex., Houston—Clubhouse.—Old River Club, H. F. Kelso, Chrmn. Com.; erect clubhouse; bungalow type.

Railway Stations, Sheds, Etc.

Fla., Fort Myers.—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Engr., Wilmington, N. C.; erect passenger depot.

Md., Baltimore.—Washington, Baltimore & Annapolis Electric R. R. Co., J. J. Doyle, Gen. Mgr., Terminal Bldg., Park Ave. nr. Fayette St.; erect freight terminal, Pratt and Eutaw Sts.; first building, 1 story and basement; 140x40 ft.; fireproof; slag roof; cement floors; bids opened Oct. 6; Otto G. Simpson, Archt., Maryland Casualty Tower. (Lately noted.)

Tenn., Albany.—Texas Central R. R., E. L.

Martin, Ch. Engr., Dallas; rebuild burned depot.

Tex., Eastland.—Texas & Pacific R. R., E. F. Mitchell, Ch. Engr., Dallas; considering erecting terminals and roundhouse; Mr. Mitchell wires Manufacturers Record: "Arrangements not definitely made nor plans prepared."

Va., Roanoke.—Norfolk & Western R. R., J. E. Crawford, Ch. Engr., Roanoke; reported to expend \$1,000,000 to erect station, machine shops, roundhouse, extend track facilities, etc.

Schools.

Fla., Tampa.—City Council adopted resolution endorsing action by Board of Public Instruction authorizing bond issue for School Dist. No. 4.

Ga., Augusta.—Board of Richmond County Commr. called election Nov. 2 on \$500,000 school bonds.

Ga., Macon.—Macon Printing School. Impct.; Urey Woodson, F. G. Bell, W. T. Anderson; erect building.

Ky., Georgetown.—Georgetown College Alumni, Marshall Adams and others; erect \$125,000 building; 3 stories and basement; 40x100 ft.; brick and steel; semi-fireproof; E. Stamler, Archt., Fayette Natl. Bank Bldg., Lexington.

Ky., Louisville.—Kentucky State Colored University, Dr. H. C. Harrison, Prest.; erect \$75,000 dormitory; 3 stories and basement; 100x100 ft.; brick and steel; semi-fireproof; Val. P. Collins, Archt., Paul Jones Bldg.

La., Mermanton.—School Board; erect building; bungalow type; brick base.

La., Plaquemine.—School Dist.; voted \$25,000 bonds. Address Board of Education.

N. C., Franklinton.—Franklinton Graded School Trustees; erect 4-room annex to building.

Okla., Red Oak.—Board of Education, Dist. No. 9, Jno. D. Morrison, Clk.; bids received until Oct. 5 by Mr. Morrison, Red Oak, and by Weathers-Huseman Co., Archt., 1006 Oil Exchange Bldg., Oklahoma City, where plans and specifications are on file.

Okla., Carnegie.—Board of Education; erect \$35,000 school; 2 stories and basement; R. W. Shaw, Archt., Enid, Okla.

Okla., Crowder.—School Board; erect \$28,000 high school; 2 stories and basement; M. T. Hardin, Archt., Muskogee.

Okla., Kellyville.—School Board, Dist. No. 31, J. W. St. Sing, Secy.; erect \$40,000 building; 60x90 ft.; brick and stone; metal roof; wood floors.

Okla., Shawnee.—Board of Education, H. G. Faust, Supt.; rejected bids to erect \$100,000 junior high school and \$20,000 addition to Rose Garden ward school; former brick; stone trim; composition roof; A. C. Davis, Archt. (Previously noted.)

Tenn., Chattanooga.—Fred B. Frazier, Commissioner Health and Education, Municipal Bldg.; bids until Oct. 14 to erect Ridgedale Grammar School; separate bids for building proper, heating, plumbing and electrical wiring; plans and specifications at office R. H. Hunt, Archt., 1225 James Bldg.

Tex., Dallas.—Board of Education; erect school, Gladstone Dr.; also school, Roosevelt and Mont Clare Sts.; frame; \$5000 and \$11,000.

Tex., Dallas.—Metropolitan Business College, A. Ragland, Prest., 1809-11 Commerce St.; erect building; 4 stories; 25x100 ft.; brick; Lang & Witchell, Archts., American Exchange Natl. Bank Bldg.

Tenn., Memphis.—University of Tennessee; erect laboratory.

Va., Richmond.—Richmond College, F. W. Boatwright, Prest.; erect \$150,000 gymnasium,

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Westhampton; 2 stories; 73x168 ft.; brick, concrete, stone and steel; slate roof on steel frame; maple floors; heat from present plant; city light; hollow fireproof tile; interior tile; Cram & Ferguson, Archts., 15 Beacon St., Boston, Mass. Address Lee & Lee, Supervising Archts., 918½ E. Main St., Richmond. (See Machinery Wanted—Window Guards.)

W. Va., Thorpe.—Adkin Dist. Board of Education, Gay C. Mace, Secy., Gary, W. Va.; erect school; brick and tile; day labor. (Lately noted.)

Stores.

Fla., Jacksonville.—D. G. Fletcher; erect \$20,000 addition to building, Parker and James Sts.

Fla., Jacksonville.—Blome-Sireck Co.; reported to erect \$150,000 building, A. C. L. R. R. and Monchleif Ave.

Fla., Jacksonville.—A. Hillman; erect building, Crystal St. between Lackawanna Ave. and Summit St.; frame.

Fla., Jacksonville.—N. E. Jarvis; erect frame building, Enterprise St. between Stockton St. and A. C. L. R. R.

Ky., Bladensburg.—T. B. Watts; erect \$10,000 store; taking bids.

Fla., Lakeland.—W. Fiske Johnson; erect brick building, South Florida Ave.; 60x80 ft.

Fla., Miami.—Davenport & Rich; erect 2-story store and office building; \$20,000.

Ky., Gray's Knob.—Wilson-Berger Coal Co.; erect \$25,000 store and office building; 2 stories and basement; 5x44 ft.; brick; F. A. Bishop, Archt., Terminal Bldg., Petersburg, Va.

Ky., Junction City.—Cumberland Wholesale Grocery Co.; erect \$75,000 building; 2 stories and basement; 60x150 ft.; brick; E. Stamler, Archt., Fayette Natl. Bank Bldg., Lexington.

Ky., Louisville.—S. S. Kresge Co., Ray Cummings, Supt. of Constr., 1815 Kresge Bldg., Detroit, Mich.; remodel building; D X. Murphy & Bro., Archts., Louisville Trust Bldg.

Okl., Muskogee.—M. O. Haspille; erect store; 2 stories and basement; 46x100 ft.; brick and stone; composition roof; wood floors; M. T. Hardin, Archt.

Okl., Waurika.—H. G. Olmstead, Oklahoma City; preparing plans for \$100,000 store and moving-picture theater.

Tenn., Nashville.—B. F. Corelion; expend \$10,000 to remodel 2-story brick building, 135 7th Ave. N.

Tenn., St. Bethlehem.—C. C. Booth; erect store near St. Bethlehem; 44x24 ft.

Tex., Dublin.—Ray Bros.; erect 1-story stone store, Frisco Ave.; 25x15 ft.

Tex., San Antonio.—J. M. Trasper; erect addition and repair building.

Va., Richmond.—W. B. Nelson; repair store, 14 E. Broad St.; \$12,000.

W. Va., Huntington.—McMahon-Diehl Co.; erect 2-story brick annex on Third Ave.; 30x100 ft.; W. B. Smith, Archt.

W. Va., Fairmont.—Mountain Drug Co., M. W. Chambers, Prest.; remodel building, Fairmont Ave. and 1st St., for store; 3 stories; 30x70 ft.; J. C. Buchinal, Archt.

Theaters.

N. C., Greensboro.—T. G. Leach and associates; erect \$150,000 theater, S. Elm St.

Tex., Waco.—City Comr., W. J. Neale and others; plan to issue \$65,000 bonds to improve William Cameron Park; erect moving picture theaters, construct swimming pool, roads, etc.

Warehouses.

Ala., Birmingham.—Centennial Ice Co., Benj. Davis, Prest.; erect ice-storage building, Third Ave. and 13th St., N.

D. C., Washington.—American Ice Co.; reported to erect storage warehouse and factory, 1143-57 19th St. N. W.; 12,000-ton storage capacity; plant, 120 tons daily.

Fla., Jacksonville.—International Harvester Co., 434 E. Bay St.; alter building.

Fla., Jacksonville.—Jacksonville Port Development Co. Ineptd.; E. K. Sharlow, Prest.

Ga., Atlanta.—Fitzhugh Knox, 1208 Candler Bldg.; erect \$35,000 warehouse; 50x160 ft.; brick, hollow fireproof tile, ornamental terra cotta; pine and concrete floors; wire glass; ventilators; steel sash and trim; elevators, \$3500.

Ga., Cairo.—West & Co.; erect warehouse.

La., Manchester.—Farmers' Land & Canal Co.; erect warehouse; 60x100 ft.; frame; capacity 10,000 sacks of rice.

La., New Orleans.—Dock Board, Hugh McCloskey, Chrmn. Bldg. Com., 200 New Court Bldg.; erect coffee and sisal warehouse, foot of Market St.; Favrot & Livaudais, Archts. (Lately noted.)

N. C., Greensboro.—Greensboro Warehouse & Storage Co.; erect 3 to 5 additional warehouses; \$40,000; 180x176 ft.; mill construction; composition roof; concrete floors; electric lights; bids desired at once on materials, including brick, crushed stone, cement and timber; Raleigh James Hughes, Archt. Address J. E. Latham Co. (Lately noted.)

S. C., Jonesville.—D. B. Free, Chrmn. Com.; promoting erection of cotton warehouse.

Tenn., Memphis.—Tayloe Paper Co., 420 S. Front St.; plans to erect building; 1 story; steel and concrete; 200x750 ft.

BUILDING CONTRACTS AWARDED

Apartment-Houses.

Ky., Lexington.—Mason & Hanger Co., Security Bldg., Contr. to erect Henry Clay Apartments, S. Main St.; 8 stories and basement; 151x55 ft.; C. C. & E. A. Weber, Archts., Miller Bldg., Cincinnati, O. (Previously noted.)

Bank and Office.

Ga., Atlanta.—Bankers' Trust Co.; erect \$60,000 building; 2 stories and basement; reinforced concrete; Arthur Tufts Co., Contr., Candler Annex.

Ky., Georgetown.—Farmers' Bank and Trust Co.; expend \$40,000 to remodel interior of building; 1 story; 52x76 ft.; marble, concrete and hardwood floors; safes; vaults; vault lights; Stewart & Stewart, Archts., 519 Main St.; Fred Weber, Contr., both Cincinnati, O. (Lately noted.)

Md., Baltimore.—Provident Savings Bank, Howard and Saratoga Sts.; erect \$20,000 branch building, 2118-20 E. Monument St.; 27x52 ft.; brick; 2 stories; W. W. Emmart, Archt., J101 Union Trust Bldg.; Hicks, Tase & Norris, Contrs., 106 W. Madison St. (Lately noted.)

Va., Altavista.—Altavista Cotton Mills, Inc.; erect brick office building; 53x40 ft.; tile roof; terrazzo floors; steam heat; electric lights; Craighill & Cardwell, Archts.; Hamilton Bros., Contrs., both Lynchburg. (Lately noted.)

Churches.

Fla., Jacksonville.—Church of Lady of Angels; erect pastor's residence; 40x39.4 ft.; frame; paper-shingle roof; pine floors; Marsh & Savelby, Archts., West Bldg.; August Hillman, Contr., 2505 Marie St. (Lately noted.)

Fla., West Tampa.—Methodist Mission; erect \$23,000 building; 2 stories; white sand-lime brick; composition roof; dormitories, classrooms, etc.; B. C. Bonfoey, Archt.; Logan Bros., Contrs.; both Tampa. (Lately noted.)

Fla., Ybor City.—Methodist Mission; erect 2-story building; \$30,000; white sand-lime brick; composition roof; dormitories, classrooms, etc.; Logan Bros., Contrs., Tampa.

Ga., Atlanta.—Zion Hill Baptist Church; erect \$80,000 building; 2 stories; brick and steel; W. H. Caldwell, Contr.

Mo., Buffalo.—Church of Christ, R. T. Andrews, Chrmn. Bldg. Com.; erect \$12,000 building; 41x67 ft.; brick veneer with concrete basement; shingle roof; concrete and hard pine floors; hot-air heat; electric lights; metal ceilings; Heckenlively & Mark, Archts.,

Springfield; Geo. Mawer, Contr., Buffalo. (Lately noted.)

Okl., Oklahoma City.—Harrison Ave. Congregational Church, Rev. Frank H. Fox, Pastor, 318 W. 10th St.; erect \$30,000 to \$35,000 building, Francis Ave. and 13th St.; unit of \$75,000 to \$90,000 structure; brick and stone; concrete foundation; ornamental terra cotta; ventilators; steam or hot-water heat; concrete floors; auditorium to seat 370; Hawk & Parr, Archts., Magnolia Bldg.; Reinhart & Donovan, Contrs. (Previously noted.)

Okl., Ponca City.—First Presbyterian Church; erect \$60,000 building; 2 stories and basement; 72x104 ft.; brick and stone; composition roof; concrete floors; Butler & Saunders, Archts., Tulsa; J. C. Ibach, Contr., Ponca City. (Lately noted.)

S. C., Chester.—Baldwin Cotton Mills; erect \$40,000 church lately noted; 60x100 ft.; hollow tile, brick and cement stucco; A. D. Gilchrist, Archt., Rock Hill; E. A. Fonda, Contr., 120½ W. Washington St., Greenville. (See Machinery Wanted—Church Equipment; Lead Glass; Art Glass Windows; Seating; Furnishings.)

City and County.

Mo., Kansas City.—Fire Station—Fire and Water Board, W. G. Goodwin, Secy., City Hall; erect fire station, 14th and Penn Sts.; 2 stories and basement; 42x69 ft.; brick; \$29,527; M. J. Connor, Archt., 1020 Central Ave.; J. O. Len, Contr., 2510 Agnes Ave. (Lately noted.)

Tex., Waco.—Fire Station.—City, R. L. Stribling, Comptroller; erect fire station; 48x48 ft.; frame, metal lath and stucco; ornamental tin-shingle roof; concrete and wood floors; stoves; lighting, \$150; metal ceilings; J. S. Herbert, Archt.; J. M. Bush, Contr., 807 Frost St. (Lately noted.)

Dwellings.

Fla., Miami.—W. J. Liddy, Box 656; erect 5-room bungalow; 40x30 ft.; wood on cement blocks; Roll Rubberoid roofing; 4-in. pine floors; electric lights; J. B. Bennett, Contr. (Lately noted.)

Ga., Atlanta.—V. T. Hagers; erect 2-story frame dwelling; Arthur Tufts Co., Contr.

Ga., Atlanta.—Ben Hodges; erect 2-story frame dwelling; C. L. Bray, Contr.

Ga., Atlanta.—W. S. Walker; erect residence; Sevier & Co., Contrs.

Ga., Augusta.—Enterprise Mfg. Co.; erect frame dwellings; \$18,600; Palmer-Spivey Construction Co., Contr.

La., New Orleans.—C. French; expend \$20,

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

000 to repair and alter residence damaged by fire; 2 stories; brick and wood; temporary composition roofing paper and slate roof; hardwood floors; Emilie Weil, Archt., Whitney Bldg.; R. MacCarthy, Contr. (Lately noted.)

Md., Baltimore.—Geo. E. Cuttle; erect 2-story frame dwelling, York Rd., near Orkney Rd.; 30x36 ft.; G. Maynard, Archt.; Lohmuller Building Co., Contr., York Rd.

Md., Baltimore.—William L. Rebello; erect 2-story frame dwelling, Ruckert Ave.; 28x36 ft.; Morris Jory, Archt., 1239 Battery Ave.; T. S. Johnson & Co., Contrs.

Md., Baltimore.—F. Talbott Gatch, Benton Heights; erect 2-story residence, near White Ave., Raspeburg; frame, concrete and stucco; 26x34 ft.; asbestos shingle roof; steam heat; John W. Nelson, Archt.; Miller-Nelson, Inc., Contr., Bel Air Rd.

Md., Baltimore.—Strathmore Land & Improvement Co.; erect 1½-story frame dwelling, Forest Ave.; 27x44 ft.; slate roof; L. E. Gerwig & Co., Archt. and Contr., 2117 N. Duke-Land Ave.

Md., Neosho.—Mrs. Marian S. Bennett, Box 625; erect \$10,000 residence; 26x60 ft.; stucco on frame; plaster-board; asphalt shingle roof; hardwood and concrete floors; hot-water heat, \$1053; city lights; ornamental terra-cotta; interior tile; Neal C. Davis, Archt., 708 Olive St., St. Louis; Leiphart & Clingpeel, Contrs., Neosho. (Lately noted.)

Tex., Corpus Christi.—Dr. C. O. Watson; erect \$20,000 residence; 2 stories; 40x42 ft.; sun parlor and 2 porches; stucco; tile or asbestos shingle roof; concrete, maple and edge grain pine floors; hot-water heat; electric lights; hollow fireproof tile; interior tile; vaults; C. L. Burchers, Archt.-Contr. (Lately noted.)

Va., Portsmouth.—Mrs. E. H. Brown; erect 1-story 7-room residence; Lafayette Residence Park; Clairy & Larmin, Contrs.

W. Va., Morgantown.—Diamond Coal Co.; erect superintendent's residence; Benj. M. Chapman, Contr.

W. Va., Morgantown.—Forest Coal Co.; erect 12 miners' dwellings and superintendent's residence; Benj. M. Chapman, Contr.

W. Va., Wheeling.—Henry G. Stifel; erect \$250,000 residence; 65x115 ft., with terrace 20x125 ft.; Indiana limestone; tile roof; marble, tile and wood floors; indirect and direct steam vapor heat; light from central plant; electric elevators; hollow fireproof tile; interior tile; safes; metal doors; Edw. Bates Franzheim, Archt.; R. R. Kitchen & Co., Contrs., both Wheeling; Ludowici-Celadon Co., Monroe Bldg., Chicago, Contr. for roofing; Ingalls Stone Co., Bedford, Ind., stone; Warren Webster & Co., Philadelphia, heating plant; construction begun.

Government and State.

Fla., Miami—Postoffice.—Treasury Dept., Jas. A. Wetmore, Acting Suprv. Archt., Washington, D. C., F. J. G. Pulsifer, Inspector, Miami; erect postoffice building, 5th St.; 40x84 ft.; 3000 sq. ft. floor space; Miami Ocean View Co., Miami Beach, Contr. for building and equipment.

Ga., Columbus—Camp Buildings.—Chiest of First Dist. Construction Service, Q. M. C., Room 2706 War Trade Bldg., 20th and B Sts., Washington, D. C.; opened bids to complete 179 buildings and utilities at Camp Benning; Selden-Brech Constr. Co., Fullerton Bldg., St. Louis, Contrs. at \$743,000. (Lately noted.)

Hospitals, Sanatoriums, Etc.

D. C., Washington.—District Commiss., 509 District Bldg.; 2-story psychopathic ward at Gallinger Hospital; brick and stone; fireproof; slate roof; wood and composition over concrete floors; separate powers heating and lighting plant; \$782,200; Snowden Ashford, Archt., District Bldg.; G. E. Wyne, Contr., Home Life Bldg. (Lately noted.)

Mo., Nevada.—State Hospital, M. T. Davis, Prest.; erect \$75,000 hospital; 3 stories and basement; 22x31 and 26x28 ft.; brick and reinforced concrete; stone trim; Hawkins & Hoener, Archts., McDaniels Bldg., Springfield; C. A. Dietre, Contr., Joplin. (Lately noted.)

Hotels.

Va., Eastville.—Northampton Hotel Corp., C. W. Holland, Prest.; expend \$30,000 to remodel hotel; extend heating and lighting plant; Owens & Sisco, Archts., Continental Bldg.; McIver Constr. Co., Contr., 706 Law Bldg.; both Baltimore.

Railway Stations, Sheds, Etc.

Va., Richmond.—Richmond, Fredericksburg & Potomac R. R., E. M. Hastings, Asst. Engr., Broad Street Station; erect brick and concrete freight warehouse; 253-ft. frontage; Jno. T. Wilson Co., Contr., Mutual Bldg.; construction about March 1. (Lately noted.)

Schools.

Ala., Hackleburg.—School Board; erect \$30,000 school; H. F. Brewster, Contr., Corinth, Miss.

Md., Baltimore.—City; erect 1-story brick addition to Vocational School, Lombard and Front Sts.; \$21,000; Fred Decker & Son, Contrs., 1209 E. Biddle St.

Md., Dickerson.—Montgomery County School Board, Dr. J. Deets, Prest., Rockville; erect \$12,000 school; 2 stories; P. R. Souders, Contr., Damascus, Md.

Md., Rockville.—Montgomery County School Beard, Dr. J. Deets, Prest.; erect 2 schools; P. R. Souders, Contr., Damascus, Md.

Md., Upper Marlboro.—Board of Education, E. S. Burroughs, Supt.; erect \$38,000 high school; 2 stories; tile; asbestos shingle and slag roof; wood floors; steam heat; C. L. Harding, Archt., 729 15th St. N. W.; T. J. Marsden, Contr., 904 B St.; both Washington, D. C. (Previously noted.)

Mo., Columbia.—University of Missouri, Dr. A. Ross Hill, Prest.; erect home economics building; 3 stories; 92x60 ft.; limestone; first and second floors, fireproof; slate roof; concrete floors; vapor heat; electric lights; \$75,000; Jas. P. Jamieson, Archt., Security Bldg., St. Louis; Simon Constr. Co., Contr., Columbia. (Previously noted.)

Mo., Easton.—Board of Education, H. M. Homan, Clk.; erect \$27,700 high school; 44x66 ft.; 2 stories; brick; wood joists; gravel roof; maple and concrete floors; plaster board, flooring and ventilators purchased; J. H. Felt & Co., Archts., Grand Avenue Temple, Kansas City; Chas. P. Norris, Contr., 11th and Mitchell Sts., St. Joseph. (Lately noted.)

Mo., Parkville.—Parkville College, M. C. Finley, Prest.; erect \$100,000 science hall; brick; stone trim; composition roof; J. H. Felt & Co., Archts., 800 Grand Avenue Temple, Kansas City. (Previously noted.)

N. C., Concord.—Stonewall Jackson Training School, V. G. Guthrey, Chrmn., Bldg. Com.,

Charlotte; erect Mecklenburg cottage; \$22,500; Louis Asbury, Archt., Charlotte; Jno. R. Query, Contr., Concord. (Lately noted.)

Okla., Miami.—State Board of Public Affairs, H. V. Bird, Secy., Oklahoma City; erect 3-story 60x130-ft. addition to School of Mines; concrete and brick; reinforced concrete floors; concrete foundation; gravel roof; \$100,000; Hawk & Parr, Archts., Magnolia Bldg.; Kraepke-Schaffer Constr. Co., both Oklahoma City. (Previously noted.)

W. Va., Marmet.—Loudon Dist. Board of Education, A. G. Barlow, Secy.; erect 4-room brick school; brick foundation; concrete footings; Egan & Reese, Archts., Day and Night Bank Bldg., Charleston.

Stores.

Ga., Atlanta.—Hoke Smith; expend \$15,000 to remodel building; B. F. Market, Contr.

Ky., Crofton.—D. T. Eramer; erect \$10,000 store; 2 stories and basement; 25x70 ft.; brick; Ruby Lumber Co., Contr., Madisonville, Ky.

Md., Baltimore.—Bernard Stern Estate; expend \$12,000 to alter building, 101-111 N. Eutaw St.; Goldberg & Fine, Contrs.

Mo., Kansas City.—Evans-Smith Drug Co., 5th and Washington Sts.; erect drug store and barrel-filling plant; 4 stories and basement; 75x100 ft.; and 1 story, 75x105 ft.; J. G. Braecklein, Archt., Grand Hotel, Kansas City, Kans.; Geo. E. Bowling & Son, Contrs., Sharp Bldg., Kansas City, Mo.

Mo., Kansas City.—W. H. Hoffstot Sunshine Safety Lamp Co., 1005 McGee St.; erect 2-story and basement building, 18th and Walnut Sts.; 50x115 ft.; brick and reinforced concrete; composition roof; R. A. Curtis, Archt., Reserve Bank Bldg.; W. W. Huff, Struc. Engr., Interstate Bldg.

W. Va., Martinsburg.—The Leader, Louis Lipsic, Prop., N. Queen St.; erect 1-story fireproof addition; 50x75 ft.

Theaters.

La., Baton Rouge.—Louisiana Theater; expend \$12,000 to improve building to include installation of \$8000 organ, electric ventilator, etc.; Praether & Stevens in charge of work.

Tex., Amarillo.—L. Jacobson, 200 Buchanan St.; erect theater; brick; 2 stories; 30-ft. frontage; \$20,000; J. Singleton, Contr.

Warehouses.

Md., Baltimore.—T. Irving Zimmerman, Main St. and Belvidere Ave.; erect 1-story frame ice-storage building, Clarke and Belvidere Aves.; 32.4x130 ft.; J. F. Hardy, Archt.-Contr., 4200 Groveland Ave.

Tenn., Memphis.—S. B. Ezell, Spartanburg, S. C.; expend \$15,000 to repair 3 warehouses; 90x150, 275x150 and 110x150 ft.; 2 stories; brick; tin and gravel roof; wood floors; conduit lighting, \$500; J. E. Wright, Contr., Builders' Exchange. (Lately noted.)

Tex., Dallas.—M. C. Turner; erect \$28,000 warehouse; 108x103 ft.; brick and wood joists; tar and gravel roof; concrete and wood floors; metal doors; electric freight elevator, \$2000. Address Orlopp & Orlopp, Archts.-Contrs., 1709 Main St. (Lately noted.)

Va., Richmond.—United States Leather Co.; erect \$25,000 warehouse; 1 story; 60x109 ft.; Coopee Lai, Archt., Law Bldg., Petersburg; E. L. L. Bass & Bro., Contrs., 708 Bainbridge St., Richmond. (Lately noted.)

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Art Glass Windows.—E. A. Fonda, 120½ W. Washington St., Greenville, S. C.—Art glass windows for building, Chester, S. C. (See Church Equipment.)

Belting.—E. P. Lindsay, Portsmouth, Va.—Belting for woodworking plant.

Belting (Conveyor).—Florida Industrial Corp., Gainesville, Fla.—150 ft. 16-in. 4 or 5-ply conveyor belting; new or second-hand.

Boiler.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—Second-hand 80 to 100 H. P. boiler, locomotive firebox type complete.

Boiler.—Ray Sawmill Co., Paul B. Ray, Prest.-Mgr., Pensacola, Fla.—125 to 150 H. P. marine type boiler; 150 lbs. pressure, with extra large firebox.

Boiler.—Warrenton Electric Light & Power Co., M. J. O'Connell, Gen. Mgr., Warrenton, Va.—Data and prices on 150 to 300 H. P. Stirling water-tube or return-tubular-type boiler, with fittings complete; 150 lbs. steam pressure; first-class condition; second-hand.

Boilers.—W. S. Nutt, Tinsman, Ark.—Prices on boilers for three 60-saw gin plant.

Bottle-cap Machinery.—Jos. N. Parker, Parker Motor Plow Co., Richmond, Va.—Names and addresses mfrs. bottle-cap mchry.

Bricks.—New Martinsville Glass Mfg. Co., Ira M. Clarke, Secy.-Mgr., New Martinsville, W. Va.—Bricks; quick delivery.

Bridge Construction.—Marshall County Supr., Holly Springs, Miss.—To open bids Oct. 16; wood and steel bridge; concrete culverts; 4.68 mi. graded highways; \$26,000 available; H. C. Dietzer, State Highway Engr., Jackson, Miss.

Bridge Construction.—Harlan County Commissioners, Harlan, Ky.—Bids until Oct. 11; concrete superstructure and steel superstructure highway bridge over Martins Fork of Cumberland River at Catrons Creek; length 162 ft., 16-ft. roadway; 545 ft. concrete substructure and steel superstructure highway bridge over Cumberland River at Wallins Creek; plans, etc., on file at Harlan, and with Electric Blueprint & Supply Co., 30 Board of Trade Bldg., Louisville, Ky.; Nelson Cory, Engr., Harlan.

Bridge Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Oct. 12; timber bridge on timber pile over St. George Creek, between St. George's Island and Piney Point, St. Mary's County; plans, etc., on file.

Bridges, etc.—La Salle Parish Police Jury, S. W. Hodges, Prest., Jena, La.—Bids until Nov. 1; 31 steel bridges from 14 to 90 ft.; capacity 15 tons.

Building Material.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Building material.

Bulldozer.—T. J. Lane, Springfield, O.—Second-hand No. 2 bulldozer; give condition, price and location.

Cars.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Mine cars.

Cars.—W. J. Alford, 3700 N. 27th St., New Birmingham, Ala.—Ten 36-in. gauge side-dump cars for coal, 5-ton capacity; new or second-hand.

Carbide.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Carbide.

Chemicals.—T. W. Dees, Long Beach, Miss.—Names and addresses chemical mfrs.

Chests (Cedar).—L. A. Jones, 17 W. 4th Ave., Huntington, W. Va.—Names and addresses mfrs. cedar chests.

Church Equipment.—E. A. Fonda, 120½ W.

Washington St., Greenville, S. C.—Leaded glass, art glass windows, seating and church furnishings for building at Chester, S. C.

Comb Circles.—Superior Thread & Yarn Co., 334 Fifth Ave., New York.—Noble comb circle; 26 pins per inch, 7 rows; two small circles; 28 pins per inch, 4 or 5 rows.

Conveyor.—National Cement Co., Ragland, Ala.—30-in. belt conveyor, 247 ft. long, center-to-center pulley; 30-in. belt conveyor, 250 ft. long, center-to-center pulley; 24-in. belt conveyor, 350 ft. long, center-to-center pulley; 30-in. belt conveyor, tripper, with or without belts; throughing rolls for each belt, 5-ft. centers; return rolls for each belt, 10-ft. centers; drive gearing for each belt; ply belting; send full description.

Conveying Equipment.—H. N. Hough Coal Co., H. N. Hough, Gen. Mgr., Lumberport, W. Va.—Prices on bucket system for 400-ton capacity; carry coal by cable 1800 ft.

Crosscutting Plant.—Leroy S. Davidson & Co., Camden, S. C.—Small outfit for crosscutting crossties.

Crusher Castings.—Collins Granite Co., R. F. No. 4, Danville, Va.—Names and addresses mfrs. manganese steel crusher castings.

Distilling Equipment.—H. W. Dexter, Box 665, Jacksonville, Fla.—Outfit to distill salty water; to obtain 2000-gal. capacity distilled water in 10 hours.

Draperies.—Eubank & Caldwell, 6 Kirk Ave., S. W., Roanoke, Va.—Correspondence with firms supplying draperies for theater. See Theater Equipment.)

Dredging.—Port Comms., S. M. Sparkman, Prest., Tampa, Fla.—Bids until Nov. 1; dredge 900-ft. slip in Ybor channel; 150 ft. wide, 27 ft. deep; remove 400,000 cu. yds. material; Benj. Thompson, Engr., Box 1004.

Drainage System.—Princess Anne County Comms., Pungo Drainage Dist. No. 1, W. T. Braithwaite, Chrmn., Norfolk, Va.—Bids until Oct. 8; construct drainage system; remove 34,904 cu. yds. earth; plans with V. H. Kelton, 210 Bank of Commerce Bldg.

Drills.—E. P. Lindsay, Portsmouth, Va.—Drills for woodworking plant.

Doors.—Ridgewood Fruit Growers, C. F. Massey, Treas., Winchester, Va.—Names and addresses mfrs. metal warehouse doors that roll like window shades.

Dredging.—Belzoni Drainage Comsn., S. Castleton, Prest., Belzoni, Miss.—To contract for dredging 112 mi. ditches.

Drills.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Drills.

Electric-light Equipment.—The Mayor, Ballinger, Tex.—Electric-light system complete; power, machinery, lines and poles.

Elevators (Grain).—Ohio Valley Distributing Co., J. B. Miles, V.-P. and Gen. Mgr., Owensboro, Ky.—Names and addresses owners grain elevators.

Engine.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—8x12 double-drum hoisting engine; double cylinder, steam-driven, complete.

Engine.—W. C. Daniel & Son, W. C. Daniel, Sr., Mgr.-Engr., Whitesburg, Ky.—12x16 or 18x20 ft. engine.

Engine.—Jos. L. Pearson, Keyesville, Va.—15.20 H. P. oil and gasoline engine, new or rebuilt.

Engines (Gas).—A. Moorman, Leitchfield, Ky.—New or second-hand 40 to 50 H. P. gas engines.

Engines.—Gulf Machinery & Investment Co., New Orleans, La.—New or second-hand 50 H. P. and 85 to 100 H. P. crude-oil engines, horizontal or vertical, 4 or 2-cycle; Diesel or semi-Diesel type.

Engines.—T. J. Lane, Springfield O.—Single and double-drum hoisting engines, all sizes, with or without boilers.

Engines.—W. S. Nutt, Tinsman, Ark.—Prices on engines for three 60-saw gin plant.

Fan (Suction).—Benjamin Smith, Box 202, Charlotte, N. C.—34 to 40-in. suction fan for 65,000 sq. ft. warehouse.

Fans.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Fans.

Food Products.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Food products, including flour, feed and groceries.

Forge.—E. P. Lindsay, Portsmouth, Va.—Forge for woodworking plant.

Furnishings.—E. A. Fonda, 120½ W. Washington St., Greenville, S. C.—Furnishings for church, Chester, S. C. (See Church Equipment.)

Generator.—W. C. Daniel & Son, W. C. Daniel, Sr., Mgr.-Engr., Whitesburg, Ky.—50-K. W. A. C. 125-volt generator with switchboard complete.

Grinding Machinery.—American Doll Co., 706 W. Main St., Louisville, Ky.—Names and addresses mfrs. sawdust-grinding machines.

Hardware.—L. A. Jones, 17 W. 4th Ave., Huntington, W. Va.—Names and addresses mfrs. of and dealers in cedar chest hardware.

Ice-cream Machinery.—A. Moorman, Leitchfield, Ky.—New or second-hand ice-cream mchry.

Ice Plant.—C. S. Guin, Ballinger, Tex.—Prices on 25 to 40-ton daily capacity ice plant.

Incinerators.—City of Fort Worth, Tex., James Liston, Secy.—Bids until Oct. 11; install 3 single-unit 12-ton and one 25-ton garbage incinerators; plans on file.

Iron Beams.—New Martinsville Glass Mfg. Co., Ira M. Clarke, Secy.-Mgr., New Martinsville, W. Va.—Iron I-beams; quick delivery.

Lathe.—Ocala Mfg. Co., Box 576, Ocala, Fla.—Prices on No. 2 and No. 3 66-in. St. Joe lathe; second-hand.

Leaded Glass.—E. A. Fonda, 120½ W. Washington St., Greenville, S. C.—Leaded glass for church, Chester, S. C. (See Church Equipment.)

Locomotive.—W. J. Alford, 3700 N. 27th St., North Birmingham, Ala.—36-in. gauge locomotive for outside mine work; saddle tank preferred.

Lumber.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Lumber.

Machine Shop (Mill) Equipment.—Lone Star Cotton Mills, H. Bruhn, Prest., San Antonio, Tex.; Gregg & Co., Archts.-Engrs., Newark, N. J. and San Antonio.—Equipment for mill machine shop and roll covering.

Machine Tools.—Southern Iron & Equipment Co., 221 Grant Bldg., Atlanta, Ga.—New or second-hand locomotive wheel lathe; small Fox lathe; punch and shear to take 40-in. throat; lathe to swing 36 in. and not less than 14 ft. between centers; 42-in.-head boring mill; set boiler plate rails, 3-roll type.

Mining Equipment.—E. B. Moore, Box 740, Abilene, Tex.—Mining mchry. for developing silver-copper mine in Southern Arizona; aerial tram 3800 ft.; treating plant, etc.

Mining Machinery.—Connellsburg By-product Coal Co., Stephen Arkwright, Mgr., Mor-

gantown, W. Va.—Electrical mining mchy. for 8000-ton daily capacity mine.

Mining Machinery.—Glogora Coal Co., Huntington, W. Va.—Mining mchy.

Mining Machinery.—Mayking Coal Corp., Mayking, Ky.—Mining mchy. for 400-ton daily capacity mine; will let contract for 400-ton storage bin; specifications on request.

Mining Machinery.—Ferndell Coal Co., Box 57, Fairmont, W. Va.—Mining mchy. for 250-ton daily capacity coal mine.

Mining Machines.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Mine-cutting machines (1922).

Motion-picture Machine.—Eubank & Caldwell, 6 Kirk Ave., S. W., Roanoke, Va.—Correspondence with firms supplying motion-picture machines. (See Theater Equipment.)

Motors.—E. P. Lindsay, Portsmouth, Va.—Motors for woodworking plant.

Motor.—Madisonville Drain Tile Co., J. D. Bobbitt, Secy.-Treas.-Mgr., Madisonville, Ky. 25 or 30 H. P. 60-cycle 3-phase A. C. 2200-volt electric motor; second-hand, if good condition.

Motor (Fan).—Pure Coal Co., I. G. Williams, Secy., 108½ Capitol St., Charleston, W. Va.—Price on fan motor.

Oil-burning Outfit.—H. W. Dexter Co., Box 665, Jacksonville, Fla.—Outfit to burn fuel oil under boilers for steam-generating purposes.

Paving.—Board of Awards, Baltimore, Md.—Bids until Oct. 13; pave Parkside Drive from Harford Rd. to Berkshire Rd.; Berkshire Rd. from Parkside Drive to Harcourt Rd.; Harcourt Rd. from Berkshire Rd. to Tyndale Ave.; cement concrete; specifications, etc., on file.

Paving.—City of Clarksdale, Miss.—Bids opened Oct. 5; 14,000 sq. yds. asphaltic concrete pavement; specifications, etc., with W. S. Bobo, City Engr.

Pipe.—Benjamin Smith, Box 202, Charlotte, N. C.—1000 ft. heavy cast-iron pipe for 65,000 sq. ft. warehouse.

Piping, etc.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Oct. 8 to furnish: Steel; iron or steel pipe; brass and copper tubing; cast-iron tees; nails; lanterns; sash chains; hasps; hinges; latches; locks; padlocks; tallow pots; water coolers; brass cuspidors; rat traps; steel taps; wooden rules; hammer handles; leather gloves; carbon bisulphide; paint brushes; acetone; muriatic acid; lard oil; lye; paint; white lead, etc. Blank forms and information (Circular 141) on application to offices of Panama Canal; Asst. Purchasing Agents at New York, New Orleans, San Francisco; United States Engr. offices throughout country.

Printing Machinery.—A. D. Miller, Mgr., Lake Region Printing Co., Eustis, Fla.—Job and cylinder printing presses.

Pumps.—W. S. Nutt, Tinsman, Ark.—Prices on pumps for three 60-saw gin plant.

Rails.—H. W. Stewart, 127 N. Dearborn St., Chicago, Ill.—200 gross tons 70-lb. relaying rails.

Rails, etc.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Rails and spikes.

Rails, etc.—W. J. Alford, 3709 N. 27th St., North Birmingham, Ala.—3 mi. 40-lb. new or relaying rails, with splice bars, frogs and switches.

Refrigerating Plant.—Miss Ida Munro, Springdale Farm, Putnam, Ga.—Small refrigerating plant to cool milk for 10-hour railway trip.

Road Construction.—Coahoma County Supvrs., Y. E. Howell, Clk., Clarksdale, Miss.

Bids opened Oct. 5; 10.6 mi. State Trunk road between Lyons and Coahoma; Federal-aid Project 49; 93,984 sq. yds. concrete paving; plans, etc., with Clk., Clarksdale, and H. C. Dietzer, State Highway Engr., Jackson, Miss.

Road Construction.—Marshall County Commissioners, J. E. Chase, Clk., Moundsville, W. Va.—To open bids Oct. 8; 2½ mi. Round Bottom road in Clay Dist.; 6 mi. Bowman Ridge road in Meade Dist.; plans, etc., with County Road Engr.

Road Construction.—Marshall County Supvrs., Hollie Springs, Miss.—To open bids Oct. 16; changed date from Sept. 22; 4.68 mi. State Trunk road between Memphis and Tupelo; Federal-aid Project 39; \$26,000 available; H. C. Dietzer, State Highway Engr., Jackson, Miss.

Road Construction.—Coahoma County Supvrs., Y. E. Howell, Clk., Clarksdale, Miss. To open bids Oct. 4; 3 mi. asphaltic concrete road on old gravel base between Lula and Rich; 8 mi. asphaltic concrete road on old gravel base between Friar Point and Clarksdale; plans, etc., with Clk.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Oct. 12; .98 mi. State Highway through town, concrete; Somerset County, Contract S-12, plans, etc., on file.

Road Construction.—Ashe County Comms., J. G. Bright, Highway Engr., Jefferson, N. C.—Bids until Oct. 20; construct 6.03 mi., 42,523 sq. yds., water-bound macadam, bituminous macadam or gravel paving; 2.03 mi. 16-ft. wide and 4 mi. 10-ft. wide; plans, etc., with County Engr.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Oct. 12; 3.62 mi. State Highway from Showell to Delaware State line, concrete; Worcester County, Contract Wo-18; plans, etc., on file.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Oct. 12; 4.27 mi. State Highway from end Contract 520 to New Windsor, concrete; Carroll County, Contract CI-27; plans, etc., on file.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.—Bids until Oct. 12; 21.62 mi. State Highway; Federal-aid Project 99-B; 57,320 cu. yds. topsoil surfacing, or 57,320 cu. yds. gravel surfacing, or 57,320 cu. yds. artificial sand-clay surfacing; specifications, etc., on file.

Road Construction.—Greenville County Supvrs., W. H. Willimon, Supvr., Greenville, S. C.—Bids until Oct. 12; 2.12 mi. Piedmont Highway between city limits and Jones' store; South Carolina, Federal-aid Project 98; 43,556 sq. yds. cement-concrete and bituminous-concrete surfacing; plans, etc., on file at Greenville, with L. M. Weisiger, Div. Engr., Laurens, S. C., and State Highway Engr., Columbia, S. C.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.—Bids until Oct. 12; 9.64 mi. State Highway; 25,310 cu. yds. topsoil surfacing; Federal-aid Project 125-A; specifications, etc., on file.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Greensboro, N. C.—Bids until Oct. 12; 21.62 mi. State Highway; Federal-aid Project 99-B; 57,320 cu. yds. topsoil surfacing, or 57,320 cu. yds. gravel surfacing, or 57,320 cu. yds. artificial sand-clay surfacing; specifications, etc., on file.

Safe.—Jos. L. Pearson, Keysville, Va.—New or second-hand safe, 750 to 1200 lbs.

Sawing Machine.—Ocala Mfg. Co., Box 576, Ocala, Fla.—Prices on Trevor patent pendulum sawing machine; second-hand.

Sawmill.—Leroy S. Davidson & Co., Camden, S. C.—Prices on sawmill for cutting cressies.

Screen.—Moxubee County Board of Supvrs., Jno. A. Tyson, Clk., Macon, Miss.—Bids until Oct. 4 to screen windows and doors of jail; plans and specifications at office of Clk.

Screen.—National Cement Co., Ragland, Ala.—Second-hand rock screen, 60-in. diam., 18-ft. long, to handle rock from 6-in. down; screen turning on trunnions preferred.

Screens.—Eubank & Caldwell, 6 Kirk Ave., S. W., Roanoke, Va.—Correspondence with firms supplying screens for theater. (See Theater Equipment.)

Seating.—E. A. Fonda, 120½ W. Washington St., Greenville, S. C.—Seating for church, Chester, S. C. (See Church Equipment.)

Sewers.—City Comms., Ada, Okla.—To open bids Oct. 19; construct sanitary lateral sewers in Dists. Nos. 11 and 12; plans, etc., from Johnson & Benham, Cons. Engrs., Firestone Bldg., Kansas City, Mo.

Seating.—Eubank & Caldwell, 6 Kirk Ave., S. W., Roanoke, Va.—Correspondence with firms supplying seats for theater. (See Theater Equipment.)

Shovels.—Liberty Coal Corp., Chas. Enzian, Mgr., McDowell, Ky.—Shovels.

Sprinkling System.—Benjamin Smith, Box 202, Charlotte, N. C.—65,000 to 70,000-gal. steel tank; 1000 ft. heavy cast-iron pipe; 34 to 40-in. suction fan; for 65,000 sq. ft. warehouse.

Sprinkler System.—M. & I. L. Brenner, 433 Church St., Norfolk, Va.—Automatic fire sprinkler system for warehouse.

Tamping Machine.—Maryland Equipment & Supply Co., Baltimore, Md.—Pawling & Harnischfeger tamping machine, with breaker; gasoline driven.

Testing Machines.—R. Wirt Robinson, Salisbury, Md.—Names and addresses mfrs. 3-screw type 100,000-lb. capacity testing machine, with 3-H. P. 220-volt A. C. motor; equal to Universal; delivered on or before Nov. 30.

Textile, etc.—Teckchand Gangaram & Co., 33-34 Gordhanas Market, Karachi, India.—To represent mfrs. of and dealers in textile, cotton, woolens, silk, seal-plush cloth, woolen rugs, blankets, hosiery; plain, meshed or knitted underwear (not union suits); imitation rolled gold jewelry, pearls, sundries, etc.

Theater Equipment.—Eubank & Caldwell, 6 Kirk Ave., S. W., Roanoke, Va.—Correspondence with firms supplying theater equipment, seats, draperies, screens, motion-picture machines, etc.

Tires, etc.—344 Tire Service Co., James R. Emery, Prest.-Mgr., 402 Marshall St., Shreveport, La.—Bids until Oct. 1; tires and vulcanizing equipment.

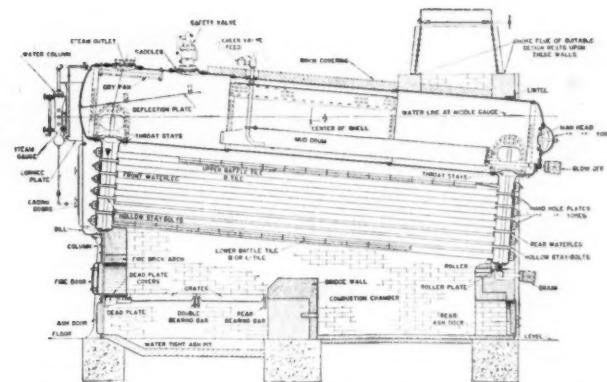
Transformer.—City Comsn., John S. Bond, Chrnn., Jacksonville, Fla.—Bids opened Oct. 15; furnish and deliver f. o. b. cars Jacksonville: 333 K. V. A. oil-cooled transformers; 6600 to 13,200-volt primary, 2300-volt secondary, 60 cycles, 7200 alternations, with four 2½ per cent full capacity taps in 13,200-volt winding or two 5 per cent taps in 6600-volt winding; information, etc., from O. Z. Tyler, Supt., Engineer Bldg., Main and Orange Sts.

Vulcanizing Equipment.—344 Tire Service Co., James R. Emery, Prest.-Mgr., Shreveport, La.—Bids until Oct. 1; vulcanizing equipment for tires.

Woodworking Machinery.—E. P. Lindsay, Portsmouth, Va.—Woodworking mchy., in-

(Continued on Page 198)

HEINE



Section of Heine boiler and setting. Note the horizontal baffling.

Practical Baffling of Water Tube Boilers

In the Heine horizontally baffled boiler the furnace gases maintain a uniform velocity and avoid sudden expansion and contraction as they circulate through the boiler. The baffling is so designed that the heat of the furnace gases is transmitted to the heating surfaces rapidly. Thus the greatest amount of evaporation from the given surface is secured. The gases are baffled in such a way as to bring constantly the fresher portions into contact with the heating surfaces as the gases proceed. There are no pockets where the gases can accumulate and form "dead" zones.

For further information, write for a copy of Boiler Logic.

All Heine Boilers conform to the A. S. M. E. Boiler Code.

HEINE SAFETY BOILER COMPANY

5327 Marcus Ave

St. Louis, Mo.



BOILERS

cluding rip saw, planer, band saw, sanding and mortising machines.

Wheat Bran, etc.—Ohio Valley Distributing Co., J. B. Miles, V.-P. and Gen. Mgr., Owensboro, Ky.—Names and addresses mfrs. wheat bran and shorts.

Window Frame Machine.—Makepeace Box & Lumber Co., Sanford, N. C.—Second-hand window frame machine to let in pulleys, cut pockets and do the graining.

Window Guards.—Lee & Lee, 918½ E. Main St., Richmond, Va.—Inside and outside wire window guards for gymnasium.

Wire (Barbed), etc.—M. A. Montalvo, Sen Co., Mayaguez, Porto Rico.—To represent mfrs. and dealers in: Barbed wire; nails; corrugated galvanized sheets; construction materials, etc.

Railroad Construction

Railways.

Ark., Little Rock.—Reported that construction of an interurban railway from Little

Rock to Butler Wells on the line to Hot Springs will soon begin; H. L. Cross and others interested.

N. C., Mount Holly.—W. T. Shipp, Gen. Mgr., Blue Ridge Development Co., Newton, N. C., reports survey made for the proposed Charlotte, Hickory & Blowing Rock Electric Railroad from Mount Holly to Blowing Rock, N. C., 105½ mi. Maximum grade 3½ per cent via the Yadkin River over the mountain at altitude of about 4000 ft., with standard degree curves. Route from Mount Holly via Lowesville, Denver, Monroe, Newton, Hickory, Lenoir and Patterson to Blowing Rock.

Va., Proffit.—Contract let by Ohio Sulphur Mining Co. to L. P. Thurston of Richmond, Va., is for 2200 ft. of standard-gauge track from Proffit Station to the company's mine, this including 215 ft. of trestle. Bids for construction and equipment to be opened Dec. 10. James E. Perkins is Supt. at Proffit. Headquarters of Ohio Sulphur Mining Co., 80 3d St., Columbus, Ohio.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

New Buildings About Complete.

Like a number of other concerns, the plant of E. C. Atkins & Co., Inc., manufacturers of "Silver Steel" saws, saw tools and machine knives, Indianapolis, Ind., became so crowded that it was necessary to provide more room. No sooner was an additional story to the handle factory completed than a four-story addition to the power plant and a three-story building were started. These two new buildings will give them additional floor space of about 60,100 square feet. The first floor of the power plant building will be an engine-room to generate their own electricity, and for the engine and dynamo and connecting with other buildings over six tons of copper cable will be used. The switchboard will measure 30 feet 4 inches by 7 feet 6 inches. The construction of this new building is of particular interest. It has 45-foot spans without any posts, the weight being carried by 30-inch steel girders. Then there is an eight-ton crane built in for moving heavy machinery. With it they can set a machine within a sixteenth of an inch of the place they want it. The other three floors will be used for factory purpose, one for the cross-cut getting-out department and the other two floors for hand-saw packing. In the three-story building the basement will be used as a grindstone cellar, one floor for cylinder saws and the other floors for narrow band saws. With these additions several of the departments will be allowed to expand, but this is not sufficient to relieve all the departments.

To Develop Steel Castings.

Announcement has been made of the appointment of R. A. Bull, Pittsburgh, as consulting metallurgist for a number of prominent steel foundries grouped for the purpose of developing and perfecting higher standards in the production of steel castings. Mr. Bull will devote his entire time to preliminary research work immediately, and has resigned his position as vice-president of the Duquesne Steel Foundry Co. The members of the group are among the best known steel foundries in the country, and include: Electric Steel Co., Chicago, Ill.; Fort Pitt Steel Castings Co., McKeesport, Pa.; Isaac G.

Johnson Company, Spuyten Duyvel, N. Y.; Lebanon Steel Foundry Co., Lebanon, Pa.; Michigan Steel Castings Co., Detroit, Mich.; Slyver Steel Castings Co., Milwaukee, Wis. Mr. Bull is widely known in the steel castings industry as an authority in metallurgy and foundry practices, is a member of numerous technical associations, and has frequently contributed to the technical press. Since 1911 he has been a director of the American Foundrymen's Association, and during 1916 and 1917 served two terms as its president. His connection with the foundry industry covers a period of over twenty years, during which he has held important positions in foundries at St. Louis, Chicago, New York and Pittsburgh.

Successful Government Sale.

J. E. Conant & Co., auctioneers, Lowell, Mass., report that the sale of Government goods and material which took place at the Proving Ground, Scituate, Mass., on September 22, 23 and 24 comprised over 1900 scheduled lots, and the attendance for the three days, which were marked by perfect weather, exceeded 800 individuals, including many from Canada. Among the bidders were more than 50 prominent business firms and other establishments. The first day's sale aggregated \$31,745.50; the second, \$316,988.38, and the third, \$70,332.69, the grand total of the sale being \$419,066.57. The entire list of lots was disposed of in an aggregate of 940 minutes, or an average of 2.02 lots per minute. Illustrating the great interest in the sale, it is said that the auctioneers had, within the two weeks immediately preceding it, 381 inquiries by mail, telegraph and cable and in person concerning the proposed offerings.

Now in Business on Own Account.

H. D. Ruhm has severed his former business connection and has opened an office at 136 Liberty St., New York city, for the development of industrial and agricultural chemical manufacturing propositions, and also for employing his experience in chemical manufacturing, buying and selling in the interest of several large connections to secure their supplies of chemicals and other raw materials, as well as in disposing of various

finished products, potash salts and phosphates being specialties. Since 1896 Mr. Ruhm has been connected with the phosphate business in Tennessee, most of the time as president of the Ruhm Phosphate Mining Co. In addition to his new activities, Mr. Ruhm will continue to handle phosphate rock and other mineral lands.

Contract for Foundry Building.

The Southern Motor Manufacturing Association, Ltd., expect that by January 1 they will be producing their own malleable iron and gray iron for various parts and products in their own foundry on the permanent Ranger plant site at Houston, Tex. A contract has been let for the erection of a Truscon monitor type 3-M foundry building to A. C. Mundee, the Truscon Steel Co.'s erection engineer. Contracts have also been let to the Whiting Foundry & Equipment Co. of Harvey, Ill., for open-hearth malleable annealing ovens, a cupola for cast-iron, core ovens, crane truck ladies, trolleys and all necessary foundry equipment. The foundry, which will cost complete from \$50,000 to \$60,000, will have a maximum capacity of 12 tons of malleable castings and 5 tons of gray iron daily. Prompt delivery of the foundry building materials has been promised by the Truscon Steel Co. of Youngstown, Ohio, and the equipment is to be delivered in twelve weeks.

New Location of Branch Office.

The Wagner Electric Manufacturing Co., St. Louis, Mo., announces the removal of its office in Salt Lake City, Utah, to 50 West Broadway, and the opening of a service station at the same address. L. Brandenburger will continue there as branch manager.

District Manager Appointed.

Fred J. Passino, formerly assistant district manager in New York territory for the Independent Pneumatic Tool Co. of Chicago, has been appointed district manager at Pittsburgh.

Appointment.

Arthur M. Shaw, A. S. C. E., consulting engineer, New Orleans, La., and lately a major of engineers in the United States Army, has been appointed to take charge of the newly-established civil engineering department of Loyola University there. Besides being a member of the American Society of Civil Engineers, Major Shaw is also a member of other prominent engineering bodies.

Now in Their Own Building.

Wiley & Co., chemists, Baltimore, Md., announce that hereafter their laboratory and offices will be located in their own building at the northwest corner of Calvert and Read Sts., in this city, and that the new telephone number is Mt. Vernon 5471.

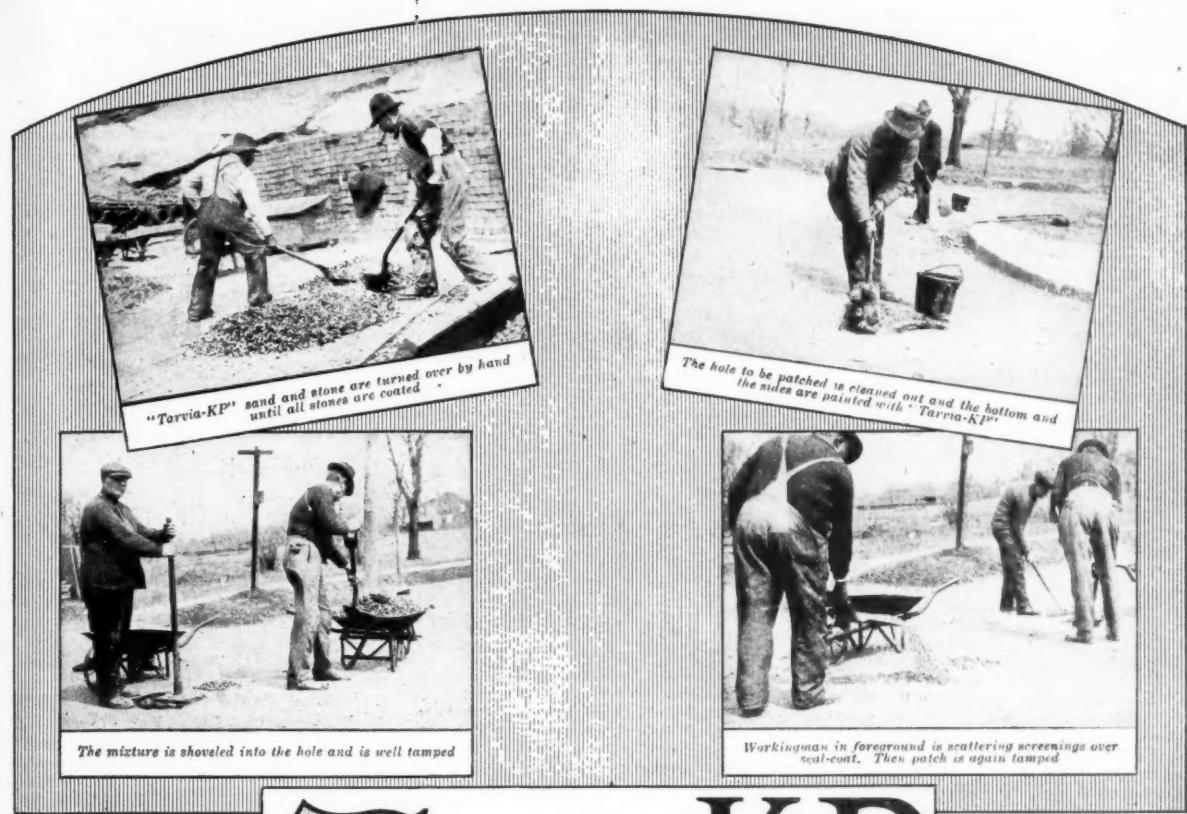
Have Opened Pittsburgh Office.

The R. H. Beaumont Co. of 319 Arch St., Philadelphia, Pa., contractors for conveying and hoisting systems and complete power plants, recently opened an office in Pittsburgh, Pa., the location being 230 Fifth Ave. Thomas Widdop is in charge.

Barytes, Barium and Lithopone.

The United States Tariff Commission has issued a report entitled "Barytes, Barium Chemical and Lithopone Industries, Including Costs of Production, 1919." This is No.

(Continued on Page 200)



Tarvia-KP

FOR COLD PATCHING

Road repairs now save money next spring—

If your roads are scarred from summer traffic, prompt patching with "Tarvia-KP" will save expensive repair work in the spring of next year.

The fall and early winter is the logical time to make economical repairs that will put your roads in prime condition during the winter.

"Tarvia-KP" used now, and whenever your roads are free from snow, will make small patches answer where larger ones would be required next spring. And the

time you save can well be used next spring in the work of road surfacing and new construction.

"Tarvia-KP" is unequalled as a quick, dependable, ever-available patching material for every type of road. It requires no heating, is extremely easy to handle and will stand up under the heaviest traffic. Freezing does not injure it.

Address our nearest office, outlining your road problems, and get the free advice of our trained specialists.

The *Barrett* Company

New York	Chicago	Philadelphia	Boston	St. Louis	Cleveland	Cincinnati	Pittsburgh
Detroit	New Orleans	Birmingham	Kansas City	Minneapolis	Dallas	Nashville	Syracuse
Seattle	Peoria	Atlanta	Duluth	Salt Lake City	Bangor	Washington	Youngstown
Milwaukee	Toledo	Columbus	Richmond	Richmond	Latrobe	Johnstown	Baltimore
				Bethlehem	Bethlehem	Lebanon	
				Elizabeth	Elizabeth	Elizabeth	
				Buffalo	Buffalo	Buffalo	

THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

18 of the Tariff Information Series, and it contains a multitude of facts valuable to everyone interested directly or indirectly in these lines. There are sundry excellent tables in addition to the abundant technical descriptive matter. Copies can be obtained from the Government Printing Office at Washington.

New York Office Opened.

The Lancaster Steel Products Corporation of Lancaster, Pa., has opened a New York office in the National Association Building at 25 West 43d street. It is under the charge of L. E. Vesey as district sales manager. Mr. Vesey has been in the Chicago office for the past year and a half.

Trade Literature.

Eight New Electric Bulletins.

Several interesting and important bulletins have recently been issued by the General Electric Co., Schenectady, N. Y. No. 48704A supersedes No. 48704 and relates to a wide field of insulating aid coating materials of this make. No. 46042 concerns the type H-2 Demand meter for determining maximum current demand; a simple and inexpensive instrument for studying economically certain characteristics of distribution systems. No. 46209 describes Thomson direct-current astatic watt-hour meters for relatively large installations. Type CS is glass inclosed and CS-3 metal inclosed. Either can be furnished for daily or log reading, or for monthly readings, as may be desired. No. 46017, second edition (old series 4870), is devoted to medium-sized high-grade instruments for switchboards on direct-current circuits. Types D-7 and D-8. No. 46028, third edition, describes a temperature indicator (for direct-current operating circuits), which gives continuously at the switchboard the operating temperature of established sections of stator windings in machines equipped with coils and terminal board. No. 44002A, superseding No. 44002, treats comprehensively of rail bonds and bonding tools in its more than fifty pages. Numerous forms of bonds are described covering wide variations in rails and joint plates, and the expert engineering service of the company is, furthermore, available on this subject. No. 47703A describes and lists a complete line of special threadless pipe fittings for the many forms of mountings for switchboard panels and their accessories. No. 47001A, second edition, superseding No. 47001, covers standard unit switchboard panels. This is a bulletin of 16 pages and is very complete. All of the bulletins are appropriately illustrated and exemplify the highest style of the printer's art.

Paper Trade Directory for 1921.

Lockwood's directory of the paper, stationery and allied trades for 1921 has just been issued. It is the forty-sixth annual edition. There were many revisions necessary in the compilation of this volume of over 900 pages because of the great activity in all branches of the industry, this including many new mills, improvement and enlargement of existing mills, while other mills are building and soon to be operated. Faithful efforts have been made to record all of these new plants as well as the improvements and expansions. Other sections of the directory have likewise been revised to keep pace with the march of progress and with similar fidelity. The directory covers mills and mill supply houses, lists of paper-mill and pulp-mill products in both the United States and Canada, manufacturers of all the various kinds of paper whose names are properly class-

ified, pad and tablet manufacturers, paper merchants in both countries, paper and pulp mills likewise, paper-bag and box makers; paper-stock and rag dealers, paper mills in South America, paper specialties, papeterie manufacturers, makers of roofing paper, stationers in the United States, Canada and Cuba, wall-paper printers, etc. The book, which is substantially bound in brown cloth and lettered in gilt, is published by the Lockwood Trade Journal Co., Inc., 10 E. 39th St., New York city.

Material-Handling Machinery.

B-G belt conveyors and self-feeding bucket loaders are described in Catalog No. 4, issued by the Barber-Greene Company, Aurora, Ill. This line of machinery for material handling includes not only the self-feeding bucket loaders, but either portable or permanent belt conveyors for the handling of all kinds of bulk material. All of them, it is stated, are definitely standardized in design and construction and are manufactured on a quantity production basis, so that users are assured of interchangeability of parts and quick delivery of repair parts when they are required. The company declares it to be its aim to produce machinery that will stand up under the hardest kind of use and deliver maximum performance.

Operating Tools by Wave Power.

"Dorman Wave-Power Tools" is the title of a 68-page book issued by W. H. Dorman & Co., Ltd., Stafford, England. These tools include rock drills riveters etc. for mining and shipbuilding, and it is stated that this book presents a series of practical working appliances which economically transmit and apply energy by waves through water. There have been heretofore five methods of transmitting power, viz., steam, direct mechanical, electric, compressed air and hydraulic. Concerning this new method of wave transmission, it is observed that, although apparently similar to hydraulic transmission, there is in hydraulics continuous flow or motion, whereas in wave transmission the liquid merely pulsates back and forth. The wave motion is obtained by means of cylinders and pistons connected up with an ordinary steam or internal-combustion engine or with an electric motor, the pipe line to convey the wave-power to the tools being of metal and flexible because of its many links. There is a fine illustration showing in operation a complete portable equipment of a wave-power rock drill, with Dorman wave-power generator operated by electric motor, and with "Flex-tel" piping and rock drill. There are many industrial applications of this mode of power transmission other than those mentioned, as it is adaptable for use in different kinds of works and factories, or for pumping, pile-driving, for road and rail vehicles and for aircraft. The book is fully illustrated, and the descriptive matter is complete and of great interest.

All About Hopewell.

A book of unusually fine photographic reproductions, accompanied by appropriate letter-press, is a new Du Pont publication bearing the title "America's Greatest Industrial Opportunity, Hopewell, Virginia." It is devoted to showing how Hopewell, which was founded during the war for the production of explosives, is now admirably adapted for the location of a great variety of industries, and that there are now 11 plants situated there for making trunks and bags, steel tools, electric insulation, cotton and wool waste, paper pulp, high-grade chinaware, artificial silk, paper board, etc. It is stated in the beginning of the book that "only those industries which

are not detrimental and which themselves can benefit by locating at Hopewell" are invited. A map shows how the town is divided into an industrial section, with several housing areas conveniently situated. Another map displays the position of Hopewell with respect to other commercial and industrial centers of the country. The pictures show the people of Hopewell at work, at rest and at play, also their factories and their homes, clubhouses, the river, etc. All of them are clear and attractive. The book is issued by the Du Pont Chemical Co., Inc., Wilmington, Del.

Financial News

New Financial Corporations.

Ala., Russellville.—First National Bank, capital \$25,000, is chartered. A. H. Dabbs, Pres.; Emit L. Reid, Cash.

Fla., Jacksonville.—First National Bank, conversion of Bank of South Jacksonville, capital \$25,000, has applied for charter. Leonard A. Usina and others.

Ga., Clermont.—Clermont State Bank, capital \$30,000; is chartered; T. J. Cobb, J. M. Hulsey, J. T. Cobb, T. B. King and others.

Ga., Swainsboro.—Central Bank, capital \$25,000, has applied for charter to begin business Nov. 14. J. G. Mason, Pres.; A. S. Bradley, V. P.; R. A. Flanders, Cash.

Ky., Beattyville.—Lee County Commercial Bank, capital \$25,000, is inceptd.; Ernest Blackwell, J. C. Richardson, V. S. Beatty and others.

Ky., Blackey.—Blackey State Bank, capital \$15,000, is inceptd. Sam Collins, Lewis E. Marvie, Jesse Hylton and others.

La., Maurice.—Bank of Maurice has begun business with Dr. J. A. Villien, Pres.; Dr. J. A. Dartez and Alex. Bonin, V. P.; C. D. Trehan, Cash.

La., New Orleans.—Whitney-Central Trust and Savings Bank and the Pan-American Bank and Trust Co. have consolidated under the head of Whitney-Central Trust and Savings Bank, their total resources exceeding \$83,000,000. John E. Boudin, Jr., is president Whitney-Central, and Crawford H. Ellis is chairman of the board of Pan-American Bank and Trust Co., and he will be vice-president of the Whitney-Central Trust and Savings Bank.

Miss., Ashland.—A new bank has been organized with W. T. Craft, Pres.; J. W. Crawford, V. P.

Okla., Frederick.—Security State Bank, capital \$50,000, is chartered. J. E. McConnell, C. E. McConnell, C. A. Huff and others.

Okla., Jennings.—First Natl. Bank of Jennings has begun business with Joseph Dvork, Cash.

S. C., Blacksburg.—Citizens' Bank of Blacksburg has begun business with M. E. Herndon, Pres.; R. E. Cline, V. P.; M. F. Sapoch, Cash.

S. C., Gramling.—Farmers' Bank of Gramling, capital \$10,000, has applied for charter. J. W. Barnett, B. M. Gramling, M. E. Bowden and others.

New Securities.

Ala., Anniston—(Paving).—\$125,000 of bonds have been sold. Address The Mayor.

Ala., Dothan—(Paving).—Paving bonds have been voted. Address The Mayor.

(Continued on Page 207)

If You Want Efficiency Install a Lunch Room



WOULD you rather eat your lunch on a coal pile, or—in a clean, *snow-white* and inviting lunch room where you could get a good, hot, wholesome meal at less cost than a housewife can fill a dinner pail. You can serve such a meal and increase the efficiency of your men by installing a *Sani* lunch room. Don't be the last in your community take this step—be the first.

The U. S. Department of Labor estimates that it costs \$500.00 per year to train the average man for permanency. Why not save this money? Install a lunch room and your men will not want to move from one plant to another. A lunch room is *economical* because your men are better *satisfied* and will do more *work* and *better* work. Write today and let us tell you what we have done for other manufacturers.

Sani
ONYX

MADE U. S. PAT. OFF. AND ALL FOREIGN COUNTRIES

Sani-Onyx table tops with *Sani-Metal* bases are *radiantly-white*, easy to clean, and will last a lifetime in any climate. Simply wiping the tops with a damp cloth keeps them clean and inviting. The *Raised Rim* (our exclusive patent) prevents chipping and dripping. *Sani-Metal* bases are made of fine grained cast iron, heavily coated with porcelain enamel. No projections or crevices for dirt to collect.

These materials can be purchased from local distributors. Our export department completely equipped for foreign business.

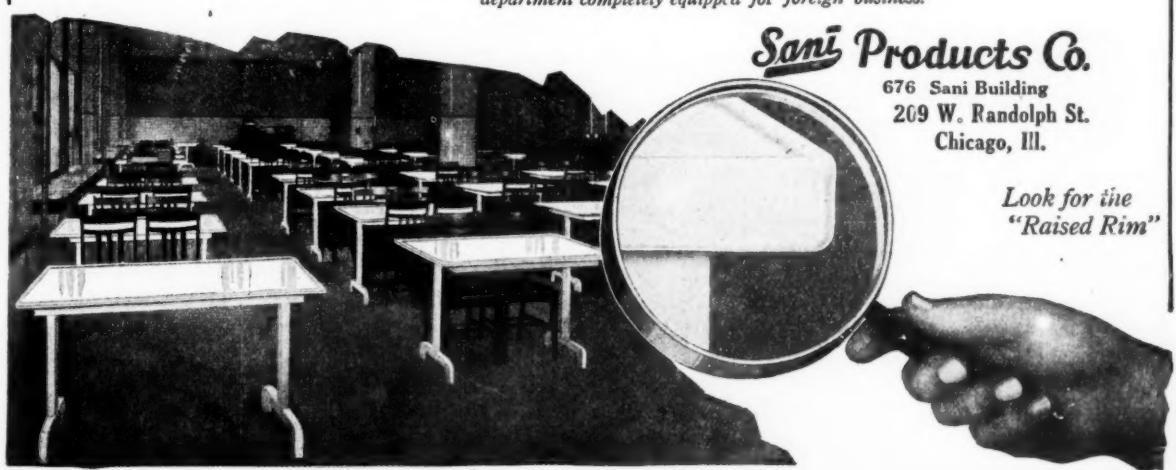
Write In Today

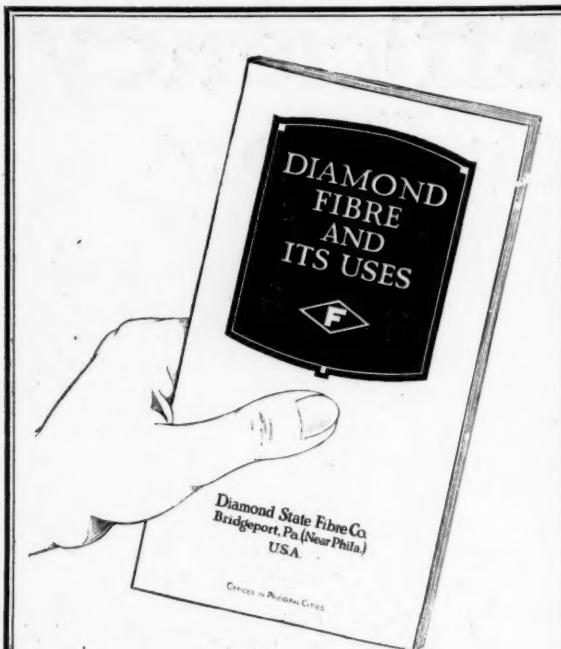
We will send you our latest catalogue showing all kinds of food and drink equipment and illustrations of many industrial lunch rooms. This wonderful book contains convincing evidence. Send for it at once. Our engineering department will lay out your space free of charge if you will forward floor plan. Write today.

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"Raised Rim"





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It tells the story of Diamond Fibre—a raw material that is playing a big part in the world's serious problems of today—a raw material that is tougher than most metals, yet lighter than aluminum. A basic material—not a substitute—high in tensile, shearing, dielectric and compressive strength—and equal to any machining process.

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After the Horse is Stolen

BELATED locking of the stable door is no more foolish than belated preparation for business changes.

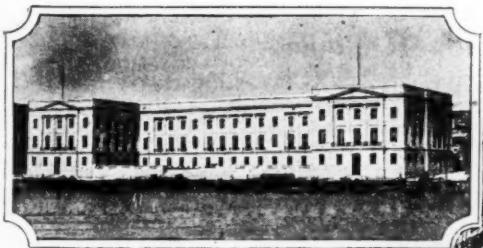
Business may be "spotty" at present; there may be a momentary lull in the demand for your own products. But no one can doubt the fundamental soundness of American industry; none can doubt that the demand for products of all kinds will soon return with increased intensity.

Decide now upon your extensions or new plants—now when the prices of many materials have responded to the temporary lull and before increased building activity forces them back to higher levels.

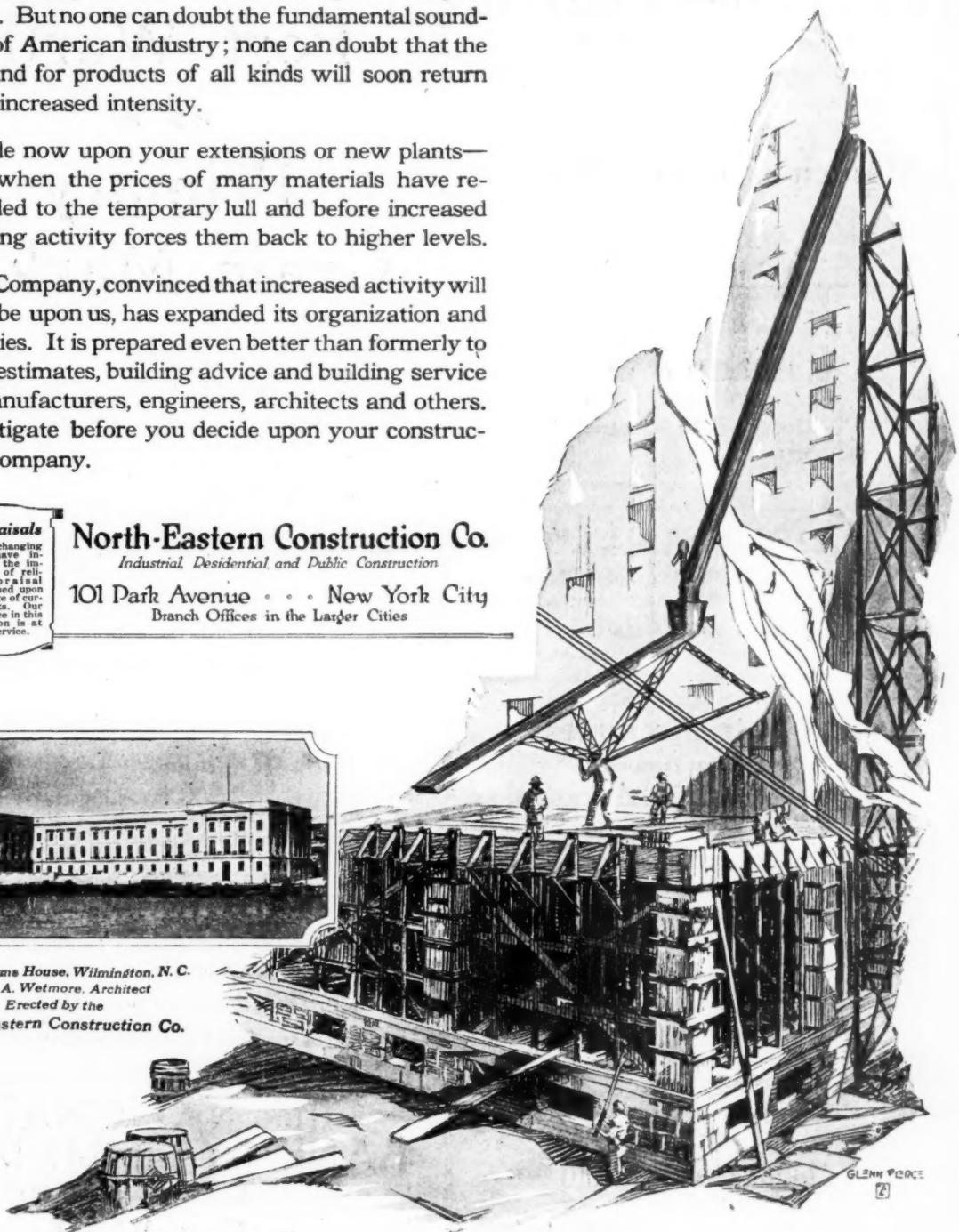
This Company, convinced that increased activity will soon be upon us, has expanded its organization and facilities. It is prepared even better than formerly to offer estimates, building advice and building service to manufacturers, engineers, architects and others. Investigate before you decide upon your construction company.

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Rapidly changing values have increased the importance of reliable appraisal work based upon knowledge of current costs. Our experience in this connection is at your service.

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We will be glad to furnish any financial or legal advice regarding proposed issues.

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Municipal Department

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Six months for \$3.50



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ranks higher than any other market south of Kansas City. Fort Worth has modern, principally fire-proof, grain elevator capacity of over 5,000,000 bushels.

¶ Through the office of the Federal Grain Inspector here, 13,884 cars were inspected in 1919—an equivalent of more than 460 trainloads of grain.

¶ Fort Worth has a flour milling capacity of 2,200 barrels daily, and an equal amount of corn products.

This Bank supplies a considerable part of the finance necessary for this great grain market, both in handling domestic and foreign movement.

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Capital and Surplus
\$4,000,000

Total Resources
\$38,000,000

Large enough to handle your biggest problems, but not too large to be interested in your smaller ones.

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We buy Municipal Securities from Contractors subject to their being awarded contract involving the issue. Write our nearest office before bidding for Municipal work.
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(WILMER BLACK, C. P. A.)
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CORPORATIONS ORGANIZED AND REPRESENTED.

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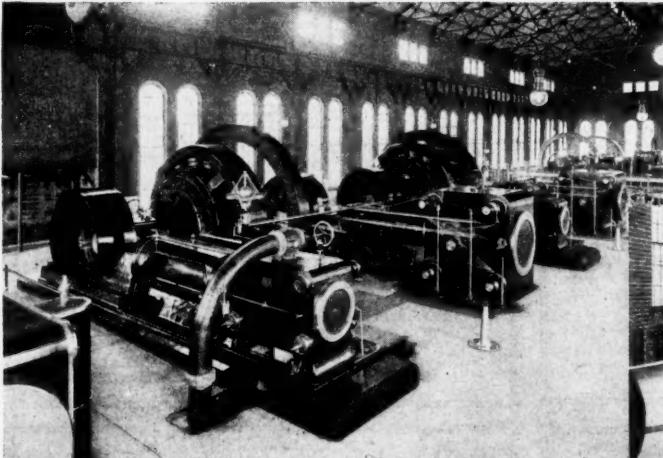
Corporation Company of Delaware
Equitable Building, Wilmington, Del.

CROCKER-WHEELER MOTORS

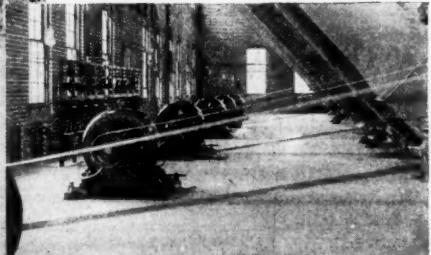
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The New Jersey Zinc Company of Hazard, Pa., like other great manufacturers at home and abroad, have been consistent users of C-W Quality Motors for many years. This Company uses two 673 D, 600 K. W., 250 V., 80 R. P. M. Generators and many C-W Motors of various sizes throughout their plant.



Impressive evidence that America's greatest manufacturers are 100 per cent. sold on high grade apparatus is found in the large number of C-W installations in the plants of industrial leaders.

C-W Motors have the sturdiness to stand the strain of *continuous production*; thus their marked adaptability to the requirements of busy manufacturing enterprises. Let a C-W representative show you how C-W Quality Motors in your plant mean the *surest* form of production insurance.

CROCKER-WHEELER COMPANY

New York Chicago Pittsburgh
Boston Cleveland Philadelphia
Syracuse Birmingham Newark
Baltimore New Haven San Francisco

CROCKER-WHEELER

Fla., Campbellton—(School).—\$17,000 of bonds have been voted. Address School Board.

Fla., Fort Myers—(School).—Bids received until 11 A. M. Nov. 1 for \$100,000 of 6 per cent Lee County Special Tax School Dist. No. 1 bonds dated Apr. 1, 1920. Address O. M. Davison, Chrmn. Board Public Instruction.

Fla., Haines City—(Street).—Sold to State Bank of Haines City at 95 and accrued interest \$60,000 of 7 per cent \$1000 denomination 20-year serial bonds offered Sept. 27.

Fla., Pensacola—(Certificates).—Sold to American National Bank at par \$20,000 of 6 per cent \$1000 denomination 3-year bonds recently offered.

Fla., Tampa—(School).—Contemplated to issue bonds for School Dist. No. 4, Hillsborough County. Address City Councilman E. A. Blanchard.

Ga., Augusta—(School).—Election Nov. 2, on \$500,000 of Richmond County bonds. Address County Comrns.

Ga., Dublin—(School).—Election Oct. 2 on \$3000 of Buckhorn School Dist., Laurens County, bonds. Address A. M. Stripling, Trustee.

Ga., Pavo—(School).—Bids will be received until Oct. 20 for \$40,000 of 6 per cent \$1000 denomination 30-year bonds of Pavo School Dist., dated Jan. 1, 1920. Address J. J. Foreman, Secy. For particulars, see Proposals Department.

Ga., Plains—(School).—The \$50,000 of 5 per cent 30-yr. serial bonds voted Aug. 17 are being offered at private sale by Shipp & Shepard, Attns., Americus, Ga.

Ga., Sylvester—(Paving).—Sold to the Robinson-Humphrey Co. of Atlanta, \$40,000 of 5 per cent \$1000 denomination bonds, dated July 1.

Ga., Watkinsville—(School).—Sold to the Robinson-Humphrey Co. of Atlanta, \$25,000 of 6 per cent \$1000 denomination bonds, dated May 1, 1920, and offered recently.

Ky., Ashland—(Water-works).—Election in November on \$250,000 of not exceeding 6 per cent \$1000 denomination 40-year bonds. Address H. R. Dysard.

Ky., Bowling Green—(Hospital).—Election Nov. 2 on \$200,000 of bonds. Address The Mayor.

Ky., Brooksville—(Road).—Sold to the First Natl. Bank of Brooksville, at par, \$50,000 of 5 per cent \$500 denomination 1931-1937 bonds of Bracken County, offered Aug. 14.

Ky., Hickman—(Improvement).—Election Nov. 30 on \$400,000 of 5 per cent 3-30-year Fulton County bonds. Address County Comrns.

Ky., Lexington—(Sewer).—Election Nov. 2 on \$300,000 of bonds. Address The Mayor.

Ky., Nicholasville—(Water Plant).—Election in November on \$36,000 of bonds. Address The Mayor.

Ky., Owensesboro—(Sewer).—Election Dec. 4 on \$400,000 of bonds. Address The Mayor.

La., Arcadia—(School).—Bids will be received until 11 A. M., Oct. 5, for the following Bienville Parish bonds: \$50,000 School Dist. No. 5; \$4000 School Dist. No. 8, and \$34,000 School Dist. No. 10. Address E. H. Fisher, Secy., Parish School Board.

La., De Ridder—(Road).—Sold to Caldwell & Co. of Nashville at par and interest, \$138,500 of 5 per cent \$500 denomination 1921-1949 bonds of Beauregard Parish Road Dist. No. 3 offered June 8.

La., Kentwood—(Paving).—\$30,000 of bonds were voted recently. Address The Mayor.

La., Shreveport—(Improvement).—Voted Sept. 14, \$1,250,000 of bonds. Address The Mayor.

Md., Oakland—(Light Plant).—Contemplated to issue \$50,000 of bonds. Address The Mayor.

Md., Upper Marlboro—(School).—Sold to the First National Bank, Farmers & Mechanics Bank and Eastern Shore Trust Co., all of Upper Marlboro, at par, \$125,000 of 5 per cent \$500 and \$1000 denomination 30-year Prince George's County bonds, dated Nov. 1 and offered Sept. 29.

Miss., Belzoni—(Cemetery).—Contemplated to issue \$10,000 of 5 per cent bonds. Address F. M. Pepper, Town Clk.

Miss., Indianola—(Road).—\$150,000 of 6 per cent \$1000 denomination serial 1921-1945 bonds of Supervisors' Dist. No. 1, Sunflower County, are being offered by the Wm. R. Compton Co. of St. Louis.

Miss., Jackson—(Improvement).—Sold to the Merchants Bank and Trust Co., at par and accrued interest, \$500,000 of 5% per cent State bonds offered Sept. 23.

Miss., Meridian—(School).—The \$15,000 Bond and \$6000 Collinsville School Dist., Lauderdale County, bonds, all 6 per cent \$100 denomination, offered Aug. 3 have not been sold. Address Geo. F. Hand, Clk. Board Supvrs.

Miss., Waynesboro—(Road).—Date of sale has not yet been set for the \$75,000 of 6 per cent 25-year serial bonds voted Sept. 25. Address Jno. P. Davis, Clk.

Mo., Excelsior Springs—(Sewer, Disposal Plant).—Election Oct. 4 on \$25,000 of bonds. Address The Mayor.

Mo., Forsyth—(Road).—Election Sept. 25 on \$9000 of Taney County Branson-Kirbyville Special Road Dist. bonds. Address County Comrns.

Mo., Fulton—(Hospital).—Sold to Stern Bros. & Co. of Kansas City, at par, \$37,500 of 6 per cent \$500 denomination 5-20 year optional bonds, dated June 1, 1920.

Mo., Jackson—(Road).—Sold to Friedman-D'Oench & Duhme of St. Louis, \$25,000 of Delta Special Road Dist. Cape County bonds, voted May 8.

Mo., Jefferson City—(Funding).—Sold to Stix & Co. of St. Louis at par and accrued interest, plus \$39 and blank bonds and attorney's fee, \$22,000 of 6 per cent \$1000 denomination 20-yr. bonds voted Aug. 24 and offered Sept. 27.

Mo., Salisbury—(Pumping Station, Water).—Bids received until 7:30 P. M., Oct. 4 for \$20,000 of 6 per cent 5-20 year optional \$500 denomination bonds, dated Oct. 15, 1920. Address A. L. Sutter, City Clk.

N. C., Charlotte—(Refunding).—Bids will be received until noon Oct. 28 for \$300,000 of 6 per cent \$1000 denomination Mecklenburg County bonds, dated Nov. 1, 1920, and maturing Nov. 1, 1950. Address A. M. McDonald, Chrmn. Board County Comrns.

N. C., Duke—(Road).—Bids will be received until 4 P. M. Oct. 9 for \$30,000 of 6 per cent \$1000 denomination Duke Township, Harnett County, bonds dated Oct. 1, 1920. Address E. S. Yarborough, Chrmn. Erwin Cotton Mills Co., Duke, N. C.

N. C., Goldsboro—(Improvement).—Bids will be received until 8:15 P. M. Oct. 14 for \$35,000 of 6 per cent bonds. Address J. G. Tyson, City Clk.

N. C., Greenville—(School).—Bids received until 2 P. M. Oct. 4 for \$40,000 of 6 per cent \$1000 denomination 30-year bonds of Farmville Township Special Tax School Dist. No. 3, Pitt County, dated Aug. 1, 1920. Address J. G. Gaskins, Clk. Board County Comrns.

N. C., Troy—(Improvement).—\$100,000 of 6 per cent \$1000 denomination Montgomery County bonds dated Aug. 1, 1920, have been

purchased by Pape, Potter, Kaufman, Inc. and the First National Bank, both of St. Louis.

N. C., Wake Forest—(Water and Sewer).—Bids received until 2 P. M. Oct. 12 for \$125,000 of 6 per cent \$1000 denomination bonds dated April 1, 1920. Address J. G. Mills, Mayor.

N. C., Wilson—(Street).—Sold to R. G. Lassiter & Co. \$531,000 of 6 per cent bonds.

Okla., Afton—(Paving).—Paving bonds have been voted. Address The Mayor.

Okla., Spiro—(Sewer, Disposal Plant).—Election Nov. 4 on \$50,000 of bonds. Address The Mayor.

Okla., Vinita—(Dams).—Election Nov. 4 on \$466,000 of bonds. Address The Mayor.

Okla., Wynona—(Water, Sewer).—\$250,000 of bonds will be voted on soon. Address Mayor M. B. Prentiss.

S. C., Anderson—(School).—Election Oct. 6 on \$2000 of not exceeding 6 per cent 20-year bonds of School Dist. No. 35, Anderson County. Address J. C. McMillan, School Trustee.

S. C., Rock Hill—(Street).—Bids received until 11 A. M. Oct. 20 for \$100,000 of 6 per cent \$1000 denomination bonds, dated Jan. 1, 1920. Address Geo. Moore, City Clk.

Tenn., Lebanon—(Funding).—Sold to Caldwell & Co. of Nashville at par, \$30,000 of 6 per cent 30-year bonds recently offered.

Tex., Center—(Road).—Sold to Smith Bros. of Crockett the following bonds offered July 17: \$80,000 Road Dist. No. 1, \$100,000 Road Dist. No. 2, \$350,000 Road Dist. No. 3, \$70,000 Road Dist. No. 5 and \$100,000 Road Dist. No. 6.

Tex., Cisco—(School).—Election Oct. 30 on \$60,000 of 5 per cent bonds. Address City Commission.

Tex., Dallas—(Hospital).—Election in November on \$225,000 of bonds. Address The Mayor.

Tex., Del Rio—(Road).—Sold to J. E. Jarrett & Co. of San Antonio \$250,000 of 5½ per cent 30-year serial \$1000 denomination Val Verde County bonds, dated Sept. 1, 1920.

Tex., Linden—(Improvement).—Election Oct. 26 on \$1,500,000 of 5½ per cent 40-year serial Cass County bonds. Address County Comrns.

Tex., Paris—(Water-works).—Voted Sept. 28 on \$1,000,000 of 5 per cent \$1000 denomination 50-year bonds. Address J. M. Crook, Mayor.

Tex., Sulphur Springs—(Road).—Contemplated to vote on \$2,000,000 of Hopkins County bonds. Address W. W. Evans, Secy. Chamber of Commerce.

Va., Crewe—(School).—Sold to W. H. Mann, of Petersburg, at par, \$25,000 of 6 per cent \$1000 denomination 10 to 30-year optional bonds dated Oct. 1 and offered Sept. 25.

W. Va., Keyser—(School).—Bids will be received until 5 P. M. Oct. 11 for \$75,000 of 6 per cent 5-20 year bonds. Address L. B. McCool, Secy. Board of Education.

Financial Notes.

Bank of Cowan, Tenn., has increased capital stock from \$10,000 to \$25,000.

Pan-American Bank & Trust Co. of New Orleans, La., will increase capital from \$800,000 to \$1,000,000.

Merchants & Planters' Bank of Mayesville, S. C., will increase capital stock from \$10,000 to \$25,000.

National Bank of Tifton, Ga., has increased capital from \$50,000 to \$100,000.

State Bank of McBee, S. C., will increase capital stock from \$10,000 to \$25,000.

Bank of Pembroke, Ky., will increase capital stock from \$20,000 to \$25,000.



PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

Bids close October 11, 1920.

PROPOSALS FOR FIVE STEEL BARGES.
Office Mississippi River Comsu., 1st and 2d Districts, Custom-house, Memphis, Tenn. Sealed proposals will be received here until 11 A. M. October 11, 1920, and then opened, for furnishing five steel barges. Further information on application.

Bids close October 15, 1920.

U. S. ENGINEER OFFICE. Jacksonville, U. S. Sealed proposals will be received here until 12 M. October 15, 1920, and then opened, for Constructing and Installing Four Scotch Marine Boilers, Foundations, Uptakes, Smokestacks and Oil Bunkers. Information on application.

Bids close October 20, 1920.

\$300,000 5½% Road Bonds

Jefferson, N. C.

Under authority of an Act of the General Assembly of North Carolina, Session 1919, entitled "An Act to Provide a Public Road Law for Ashe County," will receive sealed bids for \$300,000 5½ per cent. coupon bonds, interest payable semi-annually, principal and interest payable at the United States Mortgage & Trust Co., in the City of New York, until noon on Wednesday, the 20th day of October, 1920.

Said bonds to be dated November 1, 1920, and to mature 30 years from date, with option to recall and redeem after 20 years from date of issue, and to be in the denominations of \$1000 each, numbered 201 to 500, inclusive, none of which bonds will be sold for less than their par value. Bonds will be furnished by County, together with legal opinion of Wood & Oakley, Attorneys of Chicago, and delivered to designation of purchaser. A certified check for \$10,000 will be required to show good faith, or in lieu thereof a bond for like sum in a well recognized surety company. Right to reject any or all bids is reserved by the Board. Bids should be filed with S. G. Parsons, Chairman, Jefferson, N. C.

For further information apply to

W. R. BAUGUESS,
Attorney for the Board, Jefferson, N. C.

Bids close November 1, 1920.

\$25,000 Road Bonds

Boone, N. C.

Watauga County, North Carolina, offers Twenty-five Thousand Dollars Road Bonds, semi-annual interest, serial issue, 5 to 30 years. Sealed bids November 1, 1920, at 1 o'clock P. M. Certified check 1 per cent. of bid required. Right reserved to reject all bids. For information write W. R. Gragg, Clerk Board County Commissioners, Boone, North Carolina.

This September 13, 1920.

W. R. GRAGG,
Clerk to Board County Commissioners.

Bids close October 9, 1920.

\$90,000 6% Good Roads Bonds

Macon, Miss.

Sealed bids are invited for the purchase of \$90,000 of Good Roads Serial Bonds of Supervisors' District No. 1 of Noyes County, Mississippi, on October 9, 1920, at 2 o'clock P. M., dated September 6, 1920, bearing interest at 6 per cent. per annum, payable semi-annually, in denominations of \$500 each.

Good faith cashier's or certified check, payable to Allie Swann, President, in sum of \$500 to accompany each bid.

For particulars apply to

JOHN A. TYSON,
Clerk of Board of Supervisors, Macon, Miss.

Bids close October 20, 1920.

\$40,000 6% School Bonds

Pavo, Georgia.

Bids will be opened October 20 at office of the Trustees at Pavo, Georgia, for all or any part of an issue of \$40,000 School Improvement Bonds of Pavo School District. Bonds of denomination of \$1000, dated January 1, 1920; due thirty years after date; interest 6 per cent., payable January 1 of each year. Certified check for 1 per cent. of par value of bonds bid for must accompany bid. Right to reject any or all bids and to waive any

irregularities reserved. Bonds are tax exempt in Georgia. For further information address

J. J. FOREMAN, Secretary,
Pavo, Georgia.

Bids close October 9, 1920.

\$50,000 6% Good Roads Bonds

Macon, Miss.

Sealed bids are invited for the purchase of \$50,000 of Good Roads Serial Bonds of District No. 4 of Noyes County, Mississippi, on October 9, 1920, at 2 o'clock P. M., dated October 4, 1920, bearing interest at 6 per cent. per annum, payable semi-annually, in denominations of \$500 each.

Good faith cashier's or certified check, payable to Allie Swann, President, in sum of \$500, to accompany each bid.

For particulars apply to

JOHN A. TYSON,

Clerk of Board of Supervisors, Macon, Miss.

Bids close October 18, 1920.

\$400,000 4½% Dock and Belt Railroad Improvement Bonds

City of Pensacola, Florida.

Principal and interest payable in gold coin. Sealed bids will be received by the Board of Commissioners of the City of Pensacola, Florida, from September 16, 1920, to twelve o'clock noon of October 18, 1920, for all or any part of the City of Pensacola \$400,000 4½ per cent. Dock and Belt Railroad Improvement bonds for delivery to purchasers November 1, 1920.

Bids must be on form of proposal furnished by the City of Pensacola.

The right is reserved to reject any or all bids.

For further particulars address the United States Mortgage & Trust Co., 55 Cedar Street, New York, N. Y., or the undersigned.

F. D. SANDERS,

Mayor City of Pensacola.

Attest—

L. E. HEINBERG.

City Clerk.

Bids close October 20, 1920.

Hard Surface Road

Jefferson, N. C., September 29, 1920.

Sealed bids will be received by the Board of Good Roads Commissioners of Ashe County, at Jefferson, N. C., until noon on Wednesday, the 20th day of October, 1920, for the construction of 6.03 miles of hard-surface pavement on Projects Nos. 1, 2 and 3.

The pavement is to be constructed of Water-bound Macadam, Bituminous Macadam or Gravel. Surface is to be 16 feet wide on 2.03 miles, and 10 feet wide on 4.90 miles.

The work will consist of approximately the following:

42,523 square yards of Macadam or Gravel.

Plans, specifications, form of contract, proposal blanks and other information can be obtained at the office of the Ashe County Highway Engineer, in Jefferson, after October 8.

The right is reserved to reject any or all bids or to accept any bid deemed best, and no bids will be considered unless accompanied by certified check, payable to the Good Roads Commission for 5 per cent. of the bid, and a corporate surety bond will be required to guarantee fulfillment of the contract.

By order of the Board of Good Roads Commissioners Ashe County, North Carolina.

J. G. BRIGHT,

County Highway Engineer.

Bids close October 12, 1920.

State Highway

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT.
F. A. PROJECT NO. 98—GREENVILLE COUNTY.

Greenville, S. C.

Bids will be received at 12 o'clock noon Tuesday, October 12, 1920, at the office of W. H. Willimon, County Supervisor, in the Courthouse at Greenville, for the construction of 2.12 miles of the Piedmont Highway, between the city limits of Greenville and Jones' Store, in Greenville County.

The work consists of approximately 25

acre clearing and grubbing; 883 cu. yds. common excavation; 22,400 sq. yds. plain cement concrete surfacing, or 21,156 sq. yds. bituminous concrete surfacing, and 22,400 sq. yds. combination cement concrete header, curbing and base course; 19.02 cu. yds. Class "B" concrete in headwalls, 247.5 linear feet of vitrified-pipe culverts, and 40 linear feet of reinforced concrete pipe culverts.

Proposals must be accompanied by certified check for five hundred dollars (\$500), made payable to the Chairman of the Greenville County Highway Commission.

Plans, specifications and proposal forms are on file at the office of W. H. Willimon, County Supervisor, Greenville, S. C.; at the office of L. M. Weisiger, Division Engineer, Laurens, S. C., and at the office of the State Highway Engineer, Columbia, S. C. Plans and specifications may be obtained at the latter address upon request being accompanied by a check for five dollars (\$5), which will be refunded if plans are returned in good condition within thirty days after date of letting.

Bids close October 12, 1920.

Concrete Highways

STATE OF MARYLAND,
STATE ROADS COMMISSION.

NOTICE TO CONTRACTORS.

Baltimore, Md.

Sealed proposals for building three sections of State Highway as follows:

WORCESTER COUNTY—CONTRACT No. Wo-18: One section of State Highway from Showell to the Delaware State Line for a distance of 3.62 miles. (Concrete.)

SOMERSET COUNTY—CONTRACT No. S-12: One section of State Highway through the Town of Princess Anne for a distance of 0.98 mile. (Concrete.)

CARROLL COUNTY—CONTRACT No. Cl-27: One section of State Highway from end of Contract No. 520 to New Windsor for a distance of 4.27 miles. (Concrete.)

Will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Md., until 12 M. on the 12th day of October, 1920, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 27th day of September, 1920.

J. N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids close November 10, 1920.

Hotel Building

Bids will be received at Union, S. C., on or before November 10, 1920, by L. M. Jordan, Secretary, at the Merchants and Planters' Bank, for the erection and completion of a hotel building on a certain site in Union, S. C., according to plans, specifications and instructions to bidders as prepared by W. Douden, Architect, Union, S. C.

Plans are on file with Mr. L. M. Jordan at the Merchants and Planters' Bank, Union, S. C.; also at the Atlanta Builders' Exchange, Atlanta, Ga.; or may be seen at the architect's office. Prospective bidders may obtain complete sets by application to the architect.

Each bid must be accompanied with a certified check of \$1000 in favor of the Fairfax Harrison Hotel Co.

The Hotel Company reserve the right to reject any or all bids.

L. M. JORDAN,
Secretary of Hotel Company.
W. DOUDEN, Architect,
Union, S. C.

Bids close October 19, 1920.

Steel and Concrete Bridges

Montgomery, Ala.

Sealed bids will be received by the State Highway Commission of Alabama, at the office of the State Highway Department, Montgomery, Alabama, until 12 o'clock noon October the 19th, 1920, and at that time publicly opened, for the construction of a bridge over the Tallapoosa River, near Judkins Ferry. The bridge site is nine miles from Montgomery and three miles from Vandiver Station, the same being on the State Trunk Road between Montgomery and Wetumpka.

The bridge is composed of two 175' and two 120' steel spans and 416' of concrete approaches. The approximate quantities are as follows:

558,000 lbs. structural steel in four steel spans.
285 cu. yds. Class A concrete in floor for steel spans.

44,000 lbs. reinforcing steel in floor for steel spans.

705 cu. yds. Class B concrete in piers.

532 cu. yds. Class C concrete in piers.

18,000 lbs. reinforcing steel in piers.

5,300 lin. ft. untreated timber piling in piers.

380 cu. yds. dry excavation in piers.

500 cu. yds. wet excavation in piers.

680 cu. yds. Class A concrete in concrete approaches.

150 cu. yds. Class B concrete in concrete approaches.

126,000 lbs. reinforcing steel in concrete approaches.

Plans and specifications are on file in the office of the State Highway Department at Montgomery, and will be supplied to prospective bidders, together with proposal, for \$1.

The right to reject any or all bids is reserved.

Cash or certified check for one thousand dollars, made payable to the chairman of the State Highway Commission of Alabama,

must accompany each bid as evidence of good faith as a guarantee that if awarded contract the bidder will execute the contract and give bond as required.

W. S. KELLER,
State Highway Engineer.

Bids close October 18, 1920.

Reinforced Concrete Bridge

Cedartown, Ga.

Sealed proposals will be received by the County Commissioners of Polk County, Ga., and the City of Cedartown, Ga., until 12 o'clock noon October 18, 1920, at the office of the County Commissioners at the Courthouse, Cedartown, Ga., for the construction of a reinforced concrete arch bridge, consisting of two clear spans, 60 feet each, width of roadway 20 feet, and two 5-foot sidewalks over Big Cedar Creek at location known as West Avenue Bridge, according to detail plans and specifications on file at City Clerk's office and filed at County Commissioners' office at Courthouse.

The proposal must be in lump sum for the bridge complete, ready for fills and approaches. Each bidder will be required to furnish certified check or bidders' bond for 10 per cent. of contract price with his proposal, same to be forfeited as liquidated damages should he fail to enter contract as per terms of his proposal.

Successful bidder must make bond, approved by County Commissioners and City Council, for the total contract price.

Each bidder shall name in his bid a certain definite number of working days in which he will agree to complete the work outlined.

Contractors may submit alternate designs for reinforced concrete bridge construction. Alternate plans must conform to plans on file in length of span, width of roadway and sidewalks, height over all and loading capacity.

The right is reserved to reject any and all bids.

By order of the Board of Commissioners of Roads and Revenues of Polk County, Ga., and the City Council of the City of Cedartown, Ga.

W. K. RUSSELL,
Chairman Board R. & R.
H. M. HALL,
Mayor.

Bids close October 11, 1920.

Concrete and Steel Bridge

Harlan, Ky.

Sealed proposals addressed to the Fiscal Court of Harlan County will be received up to 4 o'clock P. M. of October 11, 1920, when they will be publicly opened and read, for the construction of a concrete substructure, steel superstructure, highway bridge over the Cumberland River, at Wallins Creek, Harlan County, Ky. Total length of bridge 545 feet, with a 16-foot roadway, three 162' 0" and one 50' 0" spans.

Bids will be received on the substructure and superstructure, but the contractor will be required to construct graded approaches on each end of the bridge, according to the plans and specifications.

A lump sum may be made upon the bridge complete if so desired.

Each bid must be accompanied by a certified check for 5 per cent. of the amount of bid submitted and the check made payable to the Sheriff of Harlan County.

Payments: The successful bidder will be required to take in payment for this work at least 50 per cent. of the amount of the contract price in Harlan County Road and Bridge Bonds, the balance to be paid in current funds.

For further information concerning local conditions address Nelson Cory, Bridge Engineer, Harlan, Ky.

ESTIMATED QUANTITIES:

Concrete, 1:2:4, 53 cubic yards; 1:2½:5, 110 cubic yards.

Concrete, 1:3:6, 318 cubic yards.

Structural steel, 493,191 pounds.

Lumber, 35,000 feet B. M.

Excavation, dry, 900 cubic yards; in water, 80 cubic yards; borrow, 1900 cubic yards.

Local conditions: Nearest railroad station, Wallins Creek, Harlan Branch, C. V. Division, L. & N. R. R.

Distance from station to site of work, 250 feet.

No local sand or suitable gravel available.

Sand can be secured from Louisville, Ky.; stone can be secured from quarries distant about 100 miles or less; lumber for forms can be secured locally.

Plans and specifications on file at this office, or Electric Blueprint & Supply Co., 30-31-32 Board of Trade Bldg., Louisville, Ky.

NELSON CORY,
Bridge Engineer.

Bids close October 11, 1920.

Concrete and Steel Bridge

Harlan, Ky.

Sealed proposals addressed to the Fiscal Court of Harlan County will be received up to 4 o'clock P. M. of October 11, 1920, when they will be publicly opened and read, for the construction of a concrete substructure, steel superstructure, highway bridge over the Martins Fork of Cumberland River, at Catrons Creek, Harlan County, Ky. Total length of bridge 162 feet, with a 16-foot roadway, one 162' 0" span.

Bids will be received on the substructure and superstructure, but the contractor will be required to construct graded approaches on each end of the bridge, according to the plans and specifications.

A lump sum may be made upon the bridge complete if so desired.

Each bid must be accompanied by a certified check for 5 per cent. of the amount of bid submitted and the check made payable to the Sheriff of Harlan County.

Payments: The successful bidder will be required to take in payment for this work at least 50 per cent. of the amount of the contract price in Harlan County Road and Bridge Bonds, the balance to be paid in current funds.

For further information concerning local conditions address Nelson Cory, Bridge Engineer, Harlan, Ky.

ESTIMATED QUANTITIES:

Concrete, 1:2:4, 28 cubic yards; 1:2½:5, 720 cubic yards.

Concrete, 1:3:6, 180 cubic yards.

Structural steel, 154,797 pounds.

Lumber, 10,000 feet B. M.

Excavation, dry, 900 cubic yards; in water,

20 cubic yards; borrow, 400 cubic yards.

Local conditions: Nearest railroad station, Harlan County, Ky., L. & N. R. R.

Distance from station to site of work, 2 miles.

No local sand or suitable gravel available.

Sand can be secured from Louisville, Ky.; stone can be secured from quarries distant about 100 miles or less; lumber for forms can be secured locally.

Plans and specifications on file at this office, or Electric Blueprint & Supply Co., 30-31-32 Board of Trade Bldg., Louisville, Ky.

NELSON CORY,
Bridge Engineer.

Bids close October 25, 1920.

Water-Works Improvement

Terrell, Tex.

The City of Terrell will receive bids until 2 P. M. Monday, October 25, 1920, for the following work necessary for the completion of water-works improvement.

Machinery as follows:

Two 6-inch two-stage centrifugal pumps, 500, 600, 700, 800 gallons per minute capacity against a 200-foot head, direct connected to 2 or 3-phase 60-cycle 220-volt electric motors, as the Commission may elect, of sufficient capacity to operate pumps above mentioned to their full capacity without a rise in temperature beyond 40 degrees centigrade. Installed complete, with all wiring, switches and transformers necessary to make currents interchangeable as between 2 or 3-phase.

All electrical work to be done in strict accordance with the requirements of the National Board of Fire Underwriters.

Also as a counter proposition, two 5-inch 3-stage centrifugal pumps with a capacity of 500, 600, 700, 800 gallons per minute against a 200-foot head, belted 2 to 3 75 H. P. oil engines of high compression ignition type, to be installed in such a manner as to guarantee continuous operation.

All machinery bidders will furnish complete specification guarantee of performance and date of shipment at the time of filing their bids.

Also bids for the construction of 1½ miles of power line over divergent routes to the extreme edge of built-up section of the city, and the two power lines, on one pole line, to new pumphouse, from the edge of built-up section to new pumphouse, a distance of three-quarters of a mile, or a total of three miles of power line.

All such work to be done in strict accordance with the requirements of the National Board of Fire Underwriters.

Also bids on one and a half miles of 10-inch Class "B" cast-iron water main, inspected and cast on American Water Works Association standard specifications. Also bid on laying of above water main, either using lead or metal for corking joints. Said pipe to be laid in strict accordance with American Water Works Association specifications and to have not less than 2½-foot cover after being placed in trenches. The contract for laying pipe to include connecting pumps with main pipe line and with suction line to intake of filtration plant.

Also bids on the construction of dam and wastewater and the clearing of reservoir, in accordance with specifications furnished by L. W. Wells, Engineer, on file with the Commission.

Approximate content of dam and wastewater 112,525 cubic yards.

Also for construction of filtration plant capable of purifying 1,000,000 gallons of water every 24 hours, on plans and specifications to be furnished by the bidders, together with guarantee as to operation of filtration plant. Contract for filtration plant to include connections with outlets from main reservoir.

The City reserves the right to reject any and all bids. Bids will be received on the work as a whole or on any unit of the work.

All bidders must deposit certified check for 10 per cent. of their bid, and if bid is accepted, make bond for 25 per cent. of bid for faithful performance of contract.

All bids to be plainly marked and addressed to Chairman of City Commission of Terrell, Texas.

September 30, 1920.

CITY COMMISSION,
Terrell, Texas.

Bids close November 1, 1920.

Dredging

Tampa, Fla.

The Board of Port Commissioners of Tampa, Florida, will receive sealed proposals at its office on the 8th floor of the City Hall, Tampa, Florida, until 3 o'clock P. M. Monday, November 1, 1920, for the dredging required for its Terminal Construction on Ybor Channel, at which time the proposals will be publicly opened and read.

Further information on application.

S. M. SPARKMAN,
President.
DR. L. A. BIZE,
Secretary.

Bids close October 11, 1920.

Garbage Incinerators

Fort Worth, Tex.

Bids will be received by the undersigned until noon October 11 for complete installation of three single-unit 12-ton and one 25-ton garbage incinerator. Complete plans and specifications to accompany bid.

JAMES LISTON,
City Secretary.

Bids close October 12, 1920.

All-Timber Bridge
STATE OF MARYLAND,
STATE ROADS COMMISSION.

NOTICE TO CONTRACTORS.

Baltimore, Md.
Sealed proposals for the construction of an all-timber bridge on timber piles over the St. George Creek, between St. George's Island and Piney Point, St. Mary's County,

Maryland, will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Md., until 12 M. on the 12th day of October, 1920, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of

Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 27th day of September, 1920.

J. N. MACKALL,

Chairman.

L. H. STEUART,
Secretary.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS, WATER POWERS, MISCELLANEOUS PROPERTIES

FOR SALE OR LEASE on royalty, phosphate lime, cement and sandbrick property, containing 400 acres, located near the City of Ocala, in Marion County, Florida.

M. B. Harlow.
Harlow Building, Colorado Building, Alexandria, Va. Washington, D. C.

I MAKE A SPECIALTY of leases, royalties, production, coal and timber lands and fluorite properties in Kentucky. Have a fine tract of timber, with mills, etc. Also handle leases in Texas and Louisiana. E. D. Watkins, Oil Producer, Irvine, Ky.

FOR SALE—80 acres developed zinc mine, equipped with mill; also timber lands; improved commercial orchards in Northwest Arkansas fruit belt; stock and grain farms. Fredericks Realty Co., Springdale, Ark.

SILICA SAND

GLASS SAND FOR SALE—Unlimited deposit of silica sand suitable for manufacture of glass, etc. Analysis 99% silica. Located 20 miles from Baltimore City on deep water. Mining and shipping facilities most favorable. Will sell or lease on royalty. Apply W. E. Ferguson, 220 St. Paul St., Balto., Md.

CLAY PROPERTIES

LARGE BRICK CLAY PROPERTY. Favorably located directly on railroad and on bricked highway, eight miles west of Newbern, N. C.; adapted for high-grade brick, tile and other clay products. Has been examined and recommended by an eminent engineer as being unusually meritorious. Report will be furnished to interested parties. Owner will accept part payment in securities of properly financed and managed company. Thomas B. Hammer, Owner, Philadelphia, Pa.

BAUXITE AND OCHRE

BAUXITE AND OCHRE—1354 acres in Randolph County, Georgia; 600 acres in cultivation, 600 acres in timber, hardwood and pine; large showing of bauxite; being worked on several adjoining tracts; fine deposit of ochre; good water and climate; 600 acres fenced; plenty of running water; two miles from C. of Ga. R. R. Aside from mineral possibilities this is an excellent opportunity for a stockman or farmer. Only \$25 per acre. Frank M. Smith & Son, 704 Silvey Bldg., Atlanta, Ga.

MARBLE DEPOSIT

PURE BLACK MARBLE FOR SALE.
Large deposit.
Apply to C. M. Niles,
Vonore, Tenn.

ZINC PROPERTY

FLUORSPAR AND ZINC properties for sale or lease, including some developed, equipped and producing mines. Also have a few Kentucky oil leases. C. W. Haynes, Marion, Ky.

COAL LANDS AND MINES

FOR SALE—Active coal operation, with complete equipment. Lease 500 acres No. 1 Elkhorn seam, finest quality coal. Analysis, price and terms on request. Frederick Howes, Paintsville, Ky.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. *When the advertisement contains a number of long words, proper allowance should be made.* Terms: Invariably cash with order; check, postoffice or express order or stamp accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 600 lines or more, 25c. per line.

COAL LANDS AND MINES

FOR SALE—Sixteen thousand acres, located in West Virginia; N. & W. Ry.; 5 seams of coal running from 45 inches to 68 inches, among them the Warfield seam and the Winefried seam. Price and terms very liberal. All information regarding the same will be furnished by T. J. Ewing, Box 443, Catlettsburg, Ky.

COAL AND TIMBER LAND

COAL AND TIMBER LANDS.

Cumberland County, Tennessee; to close estate; titled good; 70,000 acres in tracts of 2000 to 20,000 acres. E. H. Benoit, 1002 Title Guaranty Bldg., St. Louis, Missouri.

TIMBER OPERATION

TIMBER AND ACTIVE MILL FOR SALE. 70,000 feet virgin short-leaf pine timber. Fast-cutting Clark hand mill, now in operation, actually cutting 35,000 ft. boards or 50,000 ft. 2-in. dimension per day. Entire plant rebuilt this year; has Moore drykilns and plenty of steam. Complete logging equipment now in operation, including mules, carts, two skidders, three locomotives, 23 log cars, 15 miles rail. Logs 16 ft., average 85 ft. scale. Labor good and plentiful. Our own transportation facilities of two sea-going barges and one towing and freight steamer. Located in South Carolina. Everything in bang-up condition and running with full crews. Box 337, Wilmington, N. C.

FOR SALE BY THE OWNERS—50,000-000 feet yellow pine and hardwood timber, and going new band sawmill, with complete logging equipment, including teams and wagons; located on Southern Railway and Tombigbee River near Mobile, Ala. Good logging proposition by both water and logging railroad. Good shipping facilities. Long term lease and reasonable terms. No agents need apply. For particulars apply to No. 5681, care Manufacturers Record.

TIMBER

TIMBER FOR SALE—490 acres timber rights, with 17 years for cutting. Estimated to contain 52 million feet; 10 per cent. cypress, 10 per cent. yellow poplar, 20 per cent. gum, 60 per cent. pine. Located on Southern Railway at Springfield, S. C. Easy terms to reliable operator. W. L. Clement, Trustee, 601 Magnolia St., Greensboro, N. C.

TIMBER

THREE bankers and I own and offer for sale about 60,000,000 feet of remarkably attractive saw timber. About 35,000,000 feet being pine and cypress; 25,000,000 feet of hardwoods—gum, maple, ash, oak, etc. Situated on A. C. L. R. R., 65 miles from Wilmington, N. C. Good logging conditions. Price \$4 per 1000 feet. Amount to be settled upon fair cruise. We also want to sell either one-half million or one million cords of good pulp wood standing at marked inducements. W. C. Smith, P. O. Box 1128, Wilmington, N. C.

IF YOU are in the market for good pine timber, well located in North Carolina, communicate with James & James, Inc., Southern Building, Wilmington, N. C.

TIMBER FOR SALE

Sixty-six million feet, Screen County, Georgia; 75 per cent. pine, balance cypress, red gum and oak.

Fifty million feet, Burke County, Georgia; sixteen million feet pine, thirteen cypress and ash, ten million large poplar, eleven million feet red gum and oak.

Twenty million feet pine in Bulloch County, Georgia.

One hundred and fifty million feet Barnwell County, South Carolina, mostly pine; some cypress and hardwood.

All of these tracts near railroad and river.

J. W. BARNES,
Real Estate Bank Building,
Savannah, Georgia.

LATH AND TOBACCO STAVE TIMBER—FOR SALE—10,000 to 15,000 cords standing timber on N. S. R. R., near Newbern, N. C. Will sell by the cord with cash advance. Fine opportunity for laths or tobacco stave factories. Thos. B. Hammer, Philadelphia, Pa.

FARM AND TIMBER LAND

TIMBER AND LAND FOR SALE—100,000,000 feet stumpage, fine timber, near two railroads; also 75,000 acres good, naturally drained cut-over land, adapted to farming, gardening, fruit-growing, pasture and stock-raising. Box 133, Tallahassee, Fla.

WRITE for free Mississippi map and list of improved black land farms. Also wholesale cut-over and timber tracts for sale. Southern Land & Timber Co., Box 843, Meridian, Miss.

FRUIT, FARM AND TRUCK LANDS

ALABAMA

FOR SALE—2160 acres in Southeast Alabama; 1700 in cultivation, 800 in cotton, 200 in timber; 1500 acres level, balance gently rolling; 30 tenant-houses, manager's house, gin, grist and feed mills; 5 flowing wells; is paying 20 per cent. on \$50,000; land will grow any Southern crop or fruit. Price \$45,000. Terms allowed. B. B. Espy, Eufaula, Ala.

DISTRICT OF COLUMBIA

FOR SALE—Splendid tobacco farm, near National Capital. Record crop for one year, 50 bushels tobacco, 500 barrels corn, 1000 bushels wheat; 630 acres, improved by 12-room dwelling, concrete cellar, 5 houses for help, 4 large tobacco barns, double cornhouse and granary, stable with 16 stalls and 2 box stalls, large loft, smaller stable. Excellent shipping facilities by two railroads, State road and river. Price, only \$100 per acre, one-third cash, balance to suit. Zantzinger & Chew, Agents, 903 New York Ave., Washington, D. C.